Solitude Mountain Resort Master Development Plan Update: Final Environmental Impact Statement- Volume II: Response to Comments
USDA Forest Service

Follow this and additional works at: https://digitalcommons.usu.edu/elusive_docs

Part of the Environmental Sciences Commons

Recommended Citation
https://digitalcommons.usu.edu/elusive_docs/95

This Book is brought to you for free and open access by the U.S. Government Documents (Utah Regional Depository) at DigitalCommons@USU. It has been accepted for inclusion in Elusive Documents by an authorized administrator of DigitalCommons@USU. For more information, please contact digitalcommons@usu.edu.
Volume II - Response to Comments

Final Environmental Impact Statement

Solitude Mountain Resort
Master Development Plan Update
December 2001

USDA Forest Service
Wasatch-Cache National Forest
Salt Lake City, Utah
The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA’s TARGET Center at (202)-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 1400 Independence Avenue, SW, Washington, DC 20250-9410 or call (202)-720-5964 (voice or TDD). USDA is an equal opportunity provider and employer.
TABLE OF CONTENTS

1.0 - INTRODUCTION
  1.1 COMMENTS ON THE DRAFT EIS ............................................................ 1-1
  1.2 COMMENT PROCEDURE ..................................................................... 1-1
  1.3 COMMENT TRACKING METHOD ......................................................... 1-2

2.0 - SUMMARY OF COMMENT LETTERS
  2.1 SUMMARY OF PUBLIC COMMENTS .................................................. 2-1

3.0 - COMMENTS AND RESPONSES
  3.1 UNIFIED COMMENTS ....................................................................... 3-1
    A. Purpose and Need .......................................................................... 3-1
    B. Alternatives .................................................................................. 3-11
    C. Air Quality ................................................................................... 3-16
    D. Boundaries/Land Ownership ......................................................... 3-17
    E. Cumulative Effects ........................................................................ 3-17
    F. Land Use and Plans ...................................................................... 3-20
    G. NEPA Process/Forest Plan ............................................................. 3-26
    H. Noise ............................................................................................ 3-35
    I. Recreation ...................................................................................... 3-38
    J. Socioeconomics ............................................................................. 3-58
    K. Traffic and Parking ...................................................................... 3-71
    L. Utilities .......................................................................................... 3-85
    M. Vegetation .................................................................................... 3-87
    N. Visual Quality ............................................................................... 3-93
    O. Water Quality ............................................................................... 3-100
    P. Wetland and Riparian Areas ......................................................... 3-116
    Q. Wildlife ......................................................................................... 3-116
    R. General .......................................................................................... 3-130

4.0 - COPIES OF LETTERS FROM GOVERNMENT AGENCIES

TABLES

Table 1-1 Codes and Procedures Used to Evaluate Comment Letters .......... 1-3
Table 1-2 Listing of Comment Letters ..................................................... 1-4
Table 2-1 Source of Comments Received ............................................... 2-1
Table 2.2 Geographic Location of Those Who Commented on DEIS .......... 2-2
CHAPTER 1.0 - INTRODUCTION

1.1 COMMENTS ON THE DRAFT EIS

The draft EIS (DEIS) for the Solitude Master Development Plan Update was released and distributed to the public on May 3, 2001. The Notice of Availability appeared in the Federal Register on May 4, 2001, initiating the formal 45-day comment period. The comment period was scheduled to end on June 18, 2001; however, in order to ensure sufficient time for review the Forest Service extended the comment period 17 days, ending July 5, 2001. A total of 61 days were available for comment on the DEIS. Approximately 161 copies of the document were either mailed or delivered to individuals, organizations, and other government agencies. In addition, the document was made available on the US Forest Service, Wasatch-Cache National Forest’s website.

During the public comment period, the Forest Service received a total of 393 comments. Of the total, 249 comments were received as letters, reports and emails, and 144 comments were received as petition forms. The majority of the comments reflected a common theme. These letters are addressed together with a unified response. Other letters that addressed a specific topic or issue within the analysis are responded to individually in Chapter 3. Some topics appeared in several letters. In these circumstances, the comments are combined and one response is given. Written responses to the comments can be found in Chapter 3.0 of Volume II of the Final EIS.

This Volume II Final EIS document is divided into three chapters. Chapter 1 consists of an introduction providing information on the draft EIS, a description of the protocol used to track public comments, and detail on the methodology used to identify substantive comments. A full listing of all commentors, affiliation, and comment category type is also included in Chapter 1. Chapter 2 provides statistics on comments received and a general overview of the public comments issues. Chapter 3 is comprised of all extracted public comments and the specific response for each comment.

1.2 COMMENT PROCEDURE

Those receiving a copy of the DEIS were given instructions and an address of where to send comments. They were advised that comments which raised concerns with specific areas of the DEIS would be most useful to the process, as opposed to comments that simply voiced opposition or support. Throughout the comment period a folder containing comment letters was available for review at the Salt Lake Ranger District Office. Written comments were logged in the folder and used in this chapter.

Consistent with the National Environmental Policy Act (NEPA), 40 CFR 1503.4(b), this volume addresses substantive comments on the DEIS. Substantive comments include those that offer specific information that may have a bearing on the decision. However, because many people have strong feelings about the future of Solitude and Big Cottonwood Canyon we have included and responded to comments that do not directly meet the NEPA regulations for substantive
comments. It is believed that by including substantive and non-substantive comments, a better understanding of public sentiment from those that commented on the proposal is ascertained.

All comments were reviewed and evaluated as to their relevance to the environmental analysis presented in the DEIS. Each specific relevant comment was assigned to the appropriate subject matter expert for detailed response. All comments were assigned a unique identifying code and logged into an Access database. All comments are part of the administrative record for this EIS, and have been considered during the decision-making process.

1.3 COMMENT TRACKING METHOD

Table 1-1 is an index to how each comment letter was categorized and coded. It explains the categories and criteria to catalog, code and track comments. Table 1-2 lists the agencies, organizations, and individuals that commented on the DEIS, their assigned identification number, and the comment code that corresponds to the resource(s) or issue(s) they addressed in their comment submittal. To achieve direct presentation of issues, all comments were extracted as direct quotes from the original comment letters submitted to the Forest Service.

Comments extracted for response (see Chapter 3) were assigned unique tracking codes that identify Category, Comment Reference Number, and Category number of comments. For example, PUR-DC-152-2 indicates the second Purpose and Need comment extracted from comment letter DC-10. In addition, a tracking code identified with bold typeface indicates the comment is duplicated in more than one Category. For these bolded comments, the response given directs the reader to the other Category where an additional response is provided.

Table 1-1
Codes and Procedures Used to Evaluate Comment Letters

<table>
<thead>
<tr>
<th>REFERENCE NUMBER:</th>
<th>Identification Number of the Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOURCE:</td>
<td>I = Individual</td>
</tr>
<tr>
<td></td>
<td>CE = Conservation/Environmental Group</td>
</tr>
<tr>
<td></td>
<td>OG = Other Group/Organization</td>
</tr>
<tr>
<td></td>
<td>AP = Applicant or its Representative</td>
</tr>
<tr>
<td></td>
<td>LG = Local Government</td>
</tr>
<tr>
<td></td>
<td>SA = State Agency</td>
</tr>
<tr>
<td></td>
<td>FA = Federal Agency</td>
</tr>
<tr>
<td>GROUP NAME:</td>
<td>Name of group(s) or organization(s) that correspondence indicated was represented in the comments</td>
</tr>
<tr>
<td>---------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>SIGNER (Last Name, First Name):</td>
<td>The name of the person(s) who signed the letter</td>
</tr>
<tr>
<td>DATE:</td>
<td>The date the letter was written. For undated correspondence, the date it was received by the Forest Service was used</td>
</tr>
<tr>
<td>LOCATION:</td>
<td>The area from which the comment was received, based on the return address of the comment correspondence</td>
</tr>
</tbody>
</table>

**CODED COMMENT GROUPS:**

Comments were keyed to the resources, disciplines and issues addressed by the commentor. To be considered, a comment must:

1. Be signed (except for phone calls),
2. Offer a concern with a factual basis which is relevant to the decision to be made
3. Provide information beyond a general opinion or “voting” for a particular alternative or action

Comments that expressed a preference for an alternative, or which offered an opinion on an issue were coded as General (GEN). Specific responses were not developed for non-specific comments. The following list represents the resource and issue comments received.

<table>
<thead>
<tr>
<th>PUR = Purpose and Need</th>
<th>PUB = Public Involvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALT = Alternatives</td>
<td>REC = Recreation</td>
</tr>
<tr>
<td>GEN = General</td>
<td>SO-EC = Socioeconomics</td>
</tr>
<tr>
<td>AIR = Air Quality</td>
<td>TRAN = Traffic and Parking</td>
</tr>
<tr>
<td>AQU = Aquatics</td>
<td>UTIL = Utilities</td>
</tr>
<tr>
<td>Reference No.</td>
<td>Contact Type</td>
</tr>
<tr>
<td>--------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>DC-1</td>
<td>Local Government</td>
</tr>
<tr>
<td>DC-2</td>
<td>State Agency</td>
</tr>
<tr>
<td>DC-3</td>
<td>Federal Agency</td>
</tr>
<tr>
<td>DC-4</td>
<td>Federal Agency</td>
</tr>
<tr>
<td>DC-5</td>
<td>Local Government</td>
</tr>
<tr>
<td>Reference No.</td>
<td>Contact Type</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>DC-7</td>
<td>Conservation/ Environmental Group</td>
</tr>
<tr>
<td>DC-8</td>
<td>Individual</td>
</tr>
<tr>
<td>DC-9</td>
<td>Individual</td>
</tr>
<tr>
<td>DC-10</td>
<td>Individual</td>
</tr>
<tr>
<td>DC-11</td>
<td>Individual</td>
</tr>
<tr>
<td>DC-12</td>
<td>Individual</td>
</tr>
<tr>
<td>DC-13</td>
<td>Individual</td>
</tr>
<tr>
<td>DC-14</td>
<td>Individual</td>
</tr>
<tr>
<td>DC-15</td>
<td>Individual</td>
</tr>
<tr>
<td>DC-17</td>
<td>Individual</td>
</tr>
<tr>
<td>DC-18</td>
<td>Individual</td>
</tr>
<tr>
<td>Reference No.</td>
<td>Contact Type</td>
</tr>
<tr>
<td>--------------</td>
<td>--------------</td>
</tr>
<tr>
<td>DC-19</td>
<td>Individual</td>
</tr>
<tr>
<td>DC-20</td>
<td>Individual</td>
</tr>
<tr>
<td>DC-21</td>
<td>Resident - Big</td>
</tr>
<tr>
<td>DC-22</td>
<td>Resident - Big</td>
</tr>
<tr>
<td>DC-23</td>
<td>Individual</td>
</tr>
<tr>
<td>DC-24</td>
<td>Individual</td>
</tr>
<tr>
<td>DC-25</td>
<td>Individual</td>
</tr>
<tr>
<td>DC-26</td>
<td>Individual</td>
</tr>
<tr>
<td>DC-27</td>
<td>Applicant or its</td>
</tr>
<tr>
<td>DC-28</td>
<td>Resident - Big</td>
</tr>
<tr>
<td>DC-29</td>
<td>Individual</td>
</tr>
<tr>
<td>DC-30</td>
<td>Individual</td>
</tr>
<tr>
<td>DC-31</td>
<td>Resident - Big</td>
</tr>
<tr>
<td>DC-32</td>
<td>Resident - Big</td>
</tr>
<tr>
<td>DC-33</td>
<td>Individual</td>
</tr>
<tr>
<td>DC-34</td>
<td>Individual</td>
</tr>
<tr>
<td>Reference No.</td>
<td>Contact Type</td>
</tr>
<tr>
<td>--------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>DC-35</td>
<td>Individual</td>
</tr>
<tr>
<td>DC-36</td>
<td>Resident - Big Cottonwood Canyon</td>
</tr>
<tr>
<td>DC-37</td>
<td>Individual</td>
</tr>
<tr>
<td>DC-38</td>
<td>Individual</td>
</tr>
<tr>
<td>DC-39</td>
<td>Individual</td>
</tr>
<tr>
<td>DC-40</td>
<td>Applicant or its Representative</td>
</tr>
<tr>
<td>DC-41</td>
<td>Resident - Big Cottonwood Canyon</td>
</tr>
<tr>
<td>DC-42</td>
<td>Resident - Big Cottonwood Canyon</td>
</tr>
<tr>
<td>DC-43</td>
<td>Individual</td>
</tr>
<tr>
<td>DC-44</td>
<td>Resident - Big Cottonwood Canyon</td>
</tr>
<tr>
<td>DC-45</td>
<td>Resident - Big Cottonwood Canyon</td>
</tr>
<tr>
<td>DC-46</td>
<td>Individual</td>
</tr>
<tr>
<td>DC-47</td>
<td>Individual</td>
</tr>
<tr>
<td>DC-48</td>
<td>Resident - Big Cottonwood Canyon</td>
</tr>
<tr>
<td>Reference No.</td>
<td>Contact Type</td>
</tr>
<tr>
<td>--------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>DC-49</td>
<td>Resident - Big Cottonwood Canyon</td>
</tr>
<tr>
<td>DC-50</td>
<td>Individual</td>
</tr>
<tr>
<td>DC-51</td>
<td>Resident - Big Cottonwood Canyon</td>
</tr>
<tr>
<td>DC-52</td>
<td>Individual</td>
</tr>
<tr>
<td>DC-53</td>
<td>Individual</td>
</tr>
<tr>
<td>DC-54</td>
<td>Resident - Big Cottonwood Canyon</td>
</tr>
<tr>
<td>DC-55</td>
<td>Resident - Big Cottonwood Canyon</td>
</tr>
<tr>
<td>DC-56</td>
<td>Resident - Big Cottonwood Canyon</td>
</tr>
<tr>
<td>DC-57</td>
<td>Resident - Big Cottonwood Canyon</td>
</tr>
<tr>
<td>DC-58</td>
<td>Individual</td>
</tr>
<tr>
<td>DC-59</td>
<td>Individual</td>
</tr>
<tr>
<td>DC-60</td>
<td>Resident - Big Cottonwood Canyon</td>
</tr>
<tr>
<td>DC-61</td>
<td>Individual</td>
</tr>
<tr>
<td>DC-62</td>
<td>Individual</td>
</tr>
<tr>
<td>Reference No.</td>
<td>Contact Type</td>
</tr>
<tr>
<td>--------------</td>
<td>---------------</td>
</tr>
<tr>
<td>DC-63</td>
<td>Individual</td>
</tr>
<tr>
<td>DC-64</td>
<td>Individual</td>
</tr>
<tr>
<td>DC-65</td>
<td>Individual</td>
</tr>
<tr>
<td>DC-66</td>
<td>Individual</td>
</tr>
<tr>
<td>DC-67</td>
<td>Individual</td>
</tr>
<tr>
<td>DC-68</td>
<td>Individual</td>
</tr>
<tr>
<td>DC-69</td>
<td>Individual</td>
</tr>
<tr>
<td>DC-70</td>
<td>Individual</td>
</tr>
<tr>
<td>DC-71</td>
<td>Resident - Big Cottonwood Canyon</td>
</tr>
<tr>
<td>DC-72</td>
<td>Resident - Big Cottonwood Canyon</td>
</tr>
<tr>
<td>DC-73</td>
<td>Other Group/Organization</td>
</tr>
<tr>
<td>DC-74</td>
<td>Resident - Big Cottonwood Canyon</td>
</tr>
<tr>
<td>DC-75</td>
<td>Resident - Big Cottonwood Canyon</td>
</tr>
<tr>
<td>DC-76</td>
<td>Resident - Big Cottonwood Canyon</td>
</tr>
<tr>
<td>DC-77</td>
<td>Resident - Big Cottonwood Canyon</td>
</tr>
<tr>
<td>DC-78</td>
<td>Individual</td>
</tr>
<tr>
<td>DC-79</td>
<td>Resident - Big Cottonwood Canyon</td>
</tr>
<tr>
<td>DC-80</td>
<td>Resident - Big Cottonwood Canyon</td>
</tr>
</tbody>
</table>

Volume II – Response to Comments 1-9
<table>
<thead>
<tr>
<th>Reference No.</th>
<th>Contact Type</th>
<th>Organization</th>
<th>Last Name</th>
<th>First Name</th>
<th>Date</th>
<th>Location</th>
<th>Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC-82</td>
<td>Corporation</td>
<td>Alpentech, Inc.</td>
<td>vonAllmen</td>
<td>Beat</td>
<td>5/26/01</td>
<td>Salt Lake County</td>
<td>Socioeconomics, Air Quality, Traffic and Parking, Alternatives, Recreation</td>
</tr>
<tr>
<td>DC-83</td>
<td>Resident - Big Cottonwood Canyon</td>
<td></td>
<td>Hirschberg</td>
<td>Harris</td>
<td>5/31/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-84</td>
<td>Other Group/Organization</td>
<td>Salt Lake Convention &amp; Visitors</td>
<td>Davis</td>
<td>Richard</td>
<td>5/7/01</td>
<td>Salt Lake County</td>
<td>Socioeconomics</td>
</tr>
<tr>
<td>DC-85</td>
<td>Individual</td>
<td>Barretta</td>
<td>Nick</td>
<td></td>
<td>7/1/01</td>
<td>Outside Utah</td>
<td>General</td>
</tr>
<tr>
<td>DC-86</td>
<td>Individual</td>
<td>Spinti</td>
<td>Mark</td>
<td></td>
<td>7/4/01</td>
<td>Salt Lake County</td>
<td>Purpose and Need Alternatives</td>
</tr>
<tr>
<td>DC-87</td>
<td>Resident - Big Cottonwood Canyon</td>
<td></td>
<td>Barton</td>
<td>Mark</td>
<td>7/4/01</td>
<td>Salt Lake County</td>
<td>Water Quality, Wildlife, Recreation</td>
</tr>
<tr>
<td>DC-88</td>
<td>Individual</td>
<td>Dropkin</td>
<td>Mike</td>
<td></td>
<td>7/4/01</td>
<td>Salt Lake County</td>
<td>Socioeconomics</td>
</tr>
<tr>
<td>DC-89</td>
<td>Individual</td>
<td>Reese</td>
<td>Richard</td>
<td></td>
<td>7/4/01</td>
<td>Salt Lake County</td>
<td>Visual Quality, Water Quality, Traffic and Parking, Alternatives, Recreation</td>
</tr>
<tr>
<td>DC-90</td>
<td>Individual</td>
<td>Wennhold</td>
<td>Ann</td>
<td></td>
<td>7/4/01</td>
<td>Salt Lake County</td>
<td></td>
</tr>
<tr>
<td>DC-91</td>
<td>Individual</td>
<td>Lowe</td>
<td>Damon</td>
<td></td>
<td>7/4/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-92</td>
<td>Individual</td>
<td>Thomas</td>
<td>Tnj</td>
<td></td>
<td>7/4/01</td>
<td>Unknown</td>
<td>Purpose and Need Recreation, Visual Quality</td>
</tr>
<tr>
<td>DC-94</td>
<td>Individual</td>
<td>Zimowski</td>
<td>Andrea</td>
<td></td>
<td>7/4/01</td>
<td>Salt Lake County</td>
<td>General, Socioeconomics</td>
</tr>
<tr>
<td>DC-95</td>
<td>Individual</td>
<td>Moench</td>
<td>Brian</td>
<td></td>
<td>7/4/01</td>
<td>Salt Lake County</td>
<td>NEPA Process/Forest Plan, General</td>
</tr>
<tr>
<td>DC-96</td>
<td>Individual</td>
<td>Bintz</td>
<td>Charles</td>
<td></td>
<td>7/5/01</td>
<td>Salt Lake County</td>
<td>Socioeconomics, Vegetation, Land Use and Plans</td>
</tr>
<tr>
<td>DC-97</td>
<td>Individual</td>
<td>Duff</td>
<td>Stuart</td>
<td></td>
<td>7/5/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-98</td>
<td>Individual</td>
<td>Hunt</td>
<td>Jodie</td>
<td></td>
<td>7/5/01</td>
<td>Salt Lake County</td>
<td>General, Visual Quality</td>
</tr>
<tr>
<td>DC-99</td>
<td>Individual</td>
<td>Ray, Quinney &amp; Nebeker</td>
<td>Allen</td>
<td>Don</td>
<td>7/2/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-101</td>
<td>Individual</td>
<td>Burn</td>
<td>Jerry</td>
<td></td>
<td>6/29/01</td>
<td>Other Utah</td>
<td>Socioeconomics</td>
</tr>
<tr>
<td>DC-102</td>
<td>Individual</td>
<td>McNeil</td>
<td>John</td>
<td></td>
<td>11/27/98</td>
<td>Salt Lake County</td>
<td>Traffic and Parking Recreation</td>
</tr>
<tr>
<td>DC-103</td>
<td>Individual</td>
<td>Hollander</td>
<td>Milton</td>
<td></td>
<td>6/28/01</td>
<td>Salt Lake County</td>
<td>NEPA Process/Forest Plan, Socioeconomics</td>
</tr>
<tr>
<td>DC-104</td>
<td>Individual</td>
<td>Keller</td>
<td>William</td>
<td></td>
<td>6/29/01</td>
<td>Unknown</td>
<td>General Recreation</td>
</tr>
<tr>
<td>DC-105</td>
<td>Individual</td>
<td>Wycite</td>
<td>J. Pat</td>
<td></td>
<td>8/2/01</td>
<td>Salt Lake County</td>
<td>Recreation</td>
</tr>
<tr>
<td>DC-107</td>
<td>Corporation</td>
<td>Joe's Sporting Goods</td>
<td>Rauscher</td>
<td>Joe</td>
<td>6/27/01</td>
<td>Outside Utah</td>
<td>General, Socioeconomics</td>
</tr>
<tr>
<td>Reference No.</td>
<td>Contact Type</td>
<td>Organization</td>
<td>Last Name</td>
<td>First Name</td>
<td>Date</td>
<td>Location</td>
<td>Categories</td>
</tr>
<tr>
<td>--------------</td>
<td>------------------------</td>
<td>------------------------------------</td>
<td>-----------</td>
<td>------------</td>
<td>--------</td>
<td>-------------------------</td>
<td>------------------------------</td>
</tr>
<tr>
<td>DC-108</td>
<td>Resident - Big</td>
<td>Cottonwood Canyon</td>
<td>Erickson</td>
<td>Robb</td>
<td>8/2/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-109</td>
<td>Individual</td>
<td></td>
<td>Podolsky</td>
<td>Laura</td>
<td>6/30/01</td>
<td>Salt Lake County</td>
<td>General Land Use and Plans</td>
</tr>
<tr>
<td>DC-110</td>
<td>Resident - Big</td>
<td>Cottonwood Canyon</td>
<td>Phillips</td>
<td>Kendall</td>
<td>6/29/01</td>
<td>Salt Lake County</td>
<td>Recreation</td>
</tr>
<tr>
<td>DC-111</td>
<td>Individual</td>
<td></td>
<td>Ellison</td>
<td>Suzie</td>
<td>6/28/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-112</td>
<td>Resident - Big</td>
<td>Cottonwood Canyon</td>
<td>Crookston</td>
<td>James</td>
<td>8/2/01</td>
<td>Salt Lake County</td>
<td>Wildlife</td>
</tr>
<tr>
<td>DC-113</td>
<td>Individual</td>
<td></td>
<td>Wall</td>
<td>Karl</td>
<td>7/1/01</td>
<td>Salt Lake County</td>
<td>Recreation</td>
</tr>
<tr>
<td>DC-114</td>
<td>Individual</td>
<td></td>
<td>Sanders</td>
<td>Dale</td>
<td>7/1/01</td>
<td>Other Utah Counties</td>
<td>General</td>
</tr>
<tr>
<td>DC-115</td>
<td>Individual</td>
<td></td>
<td>Wall</td>
<td>Mary</td>
<td>7/1/01</td>
<td>Salt Lake County</td>
<td>General Recreation</td>
</tr>
<tr>
<td>DC-116</td>
<td>Individual</td>
<td></td>
<td>Nellison</td>
<td>Micaela</td>
<td>8/2/01</td>
<td>Salt Lake County</td>
<td>General Land Use and Plans</td>
</tr>
<tr>
<td>DC-117</td>
<td>Individual</td>
<td></td>
<td>Nelson</td>
<td>Deidre</td>
<td>6/10/01</td>
<td>Unknown</td>
<td>Recreation</td>
</tr>
<tr>
<td>DC-118</td>
<td>Individual</td>
<td></td>
<td>Schlotterbeck</td>
<td>Andrew</td>
<td>6/21/01</td>
<td>Salt Lake County</td>
<td>Alternatives Traffic and Parking</td>
</tr>
<tr>
<td>DC-119</td>
<td>Resident - Big</td>
<td>Cottonwood Canyon</td>
<td>O'Donnell</td>
<td>Robert</td>
<td>8/2/01</td>
<td>Salt Lake County</td>
<td>Recreation</td>
</tr>
<tr>
<td>DC-120</td>
<td>Individual</td>
<td></td>
<td>Garcia</td>
<td>Rosalind</td>
<td>8/2/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-121</td>
<td>Individual</td>
<td></td>
<td>Gardner</td>
<td>Thomas</td>
<td>6/27/01</td>
<td>Salt Lake County</td>
<td>General Socioeconomics</td>
</tr>
<tr>
<td>DC-122</td>
<td>Individual</td>
<td></td>
<td>Tozer</td>
<td>W. James</td>
<td>6/24/01</td>
<td>Outside Utah</td>
<td>General</td>
</tr>
<tr>
<td>DC-123</td>
<td>Corporation</td>
<td>Layton Construction Company</td>
<td>Rindlisbacher</td>
<td>Alan</td>
<td>6/26/01</td>
<td>Salt Lake County</td>
<td>Recreation</td>
</tr>
<tr>
<td>DC-124</td>
<td>Individual</td>
<td></td>
<td>Kennedy</td>
<td>Jennifer</td>
<td>6/24/01</td>
<td>Outside Utah</td>
<td>General</td>
</tr>
<tr>
<td>DC-125</td>
<td>Individual</td>
<td></td>
<td>Rollins</td>
<td>Helen</td>
<td>6/25/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-126</td>
<td>Individual</td>
<td></td>
<td>Steffensen</td>
<td>Pam</td>
<td>6/18/01</td>
<td>Unknown</td>
<td>Recreation</td>
</tr>
<tr>
<td>DC-127</td>
<td>Individual</td>
<td>Professional Care Body</td>
<td>Fumen</td>
<td>Gordon</td>
<td>6/21/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-128</td>
<td>Resident - Big</td>
<td>Cottonwood Canyon</td>
<td>Simpson</td>
<td>Donnie</td>
<td>6/23/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-129</td>
<td>Individual</td>
<td></td>
<td>Ebersole</td>
<td>Bernard</td>
<td>6/19/01</td>
<td>Outside Utah</td>
<td>General</td>
</tr>
<tr>
<td>DC-130</td>
<td>Individual</td>
<td></td>
<td>Parkins</td>
<td>Carolyn</td>
<td>6/23/01</td>
<td>Other Utah Counties</td>
<td>General Recreation</td>
</tr>
<tr>
<td>DC-131</td>
<td>Individual</td>
<td></td>
<td>Ward, Jr.</td>
<td>H. S.</td>
<td>6/20/01</td>
<td>Outside Utah</td>
<td>General</td>
</tr>
<tr>
<td>DC-132</td>
<td>Individual</td>
<td></td>
<td>Parkins</td>
<td>Frederick</td>
<td>6/23/01</td>
<td>Other Utah Counties</td>
<td>General</td>
</tr>
<tr>
<td>DC-133</td>
<td>Individual</td>
<td></td>
<td>Brunvand</td>
<td>Jan</td>
<td>6/24/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-134</td>
<td>Individual</td>
<td></td>
<td>Watson</td>
<td>Diane</td>
<td>6/22/01</td>
<td>Outside Utah</td>
<td>General</td>
</tr>
<tr>
<td>DC-135</td>
<td>Applicant or its</td>
<td>Representative</td>
<td>DeMeyere</td>
<td>Jim</td>
<td>6/21/01</td>
<td>Outside Utah</td>
<td>General</td>
</tr>
<tr>
<td>Reference No.</td>
<td>Contact Type</td>
<td>Organization</td>
<td>Last Name</td>
<td>First Name</td>
<td>Date</td>
<td>Location</td>
<td>Categories</td>
</tr>
<tr>
<td>--------------</td>
<td>--------------</td>
<td>---------------</td>
<td>-----------</td>
<td>------------</td>
<td>-----------</td>
<td>--------------</td>
<td>----------------------------</td>
</tr>
<tr>
<td>DC-136</td>
<td>Individual</td>
<td></td>
<td>Franklin</td>
<td>Naomi</td>
<td>6/25/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-137</td>
<td>Individual</td>
<td></td>
<td>Caldwell</td>
<td>Tricia</td>
<td>6/18/01</td>
<td>Unknown</td>
<td>Recreation</td>
</tr>
<tr>
<td>DC-138</td>
<td>Other Group/ Organization</td>
<td>Bicycle Utah, Inc.</td>
<td>Oelerich</td>
<td>Red</td>
<td>6/25/01</td>
<td>Summit County</td>
<td>Recreation</td>
</tr>
<tr>
<td>DC-139</td>
<td>Applicant or its Representative</td>
<td></td>
<td>Mytch</td>
<td>Cindy</td>
<td>6/23/01</td>
<td>Salt Lake County</td>
<td>Recreation, Socioeconomics</td>
</tr>
<tr>
<td>DC-140</td>
<td>Individual</td>
<td></td>
<td>Tutor</td>
<td>Jennifer</td>
<td>6/19/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-141</td>
<td>Individual</td>
<td></td>
<td>Loeber</td>
<td>Cindy</td>
<td>8/3/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-142</td>
<td>Individual</td>
<td></td>
<td>Jensen</td>
<td>Erika</td>
<td>6/21/01</td>
<td>Unknown</td>
<td>Recreation</td>
</tr>
<tr>
<td>DC-143</td>
<td>Individual</td>
<td></td>
<td>Long</td>
<td>Sandy</td>
<td>6/6/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-144</td>
<td>Individual</td>
<td></td>
<td>Smith</td>
<td>Richard</td>
<td>7/5/01</td>
<td>Salt Lake County</td>
<td>Socioeconomics</td>
</tr>
<tr>
<td>DC-146</td>
<td>Individual</td>
<td></td>
<td>Bintz</td>
<td>Charles</td>
<td>7/5/01</td>
<td>Salt Lake County</td>
<td>Socioeconomics</td>
</tr>
<tr>
<td>DC-148</td>
<td>Individual</td>
<td></td>
<td>Reynolds</td>
<td>Marvelle</td>
<td>7/5/01</td>
<td>Unknown</td>
<td>General</td>
</tr>
<tr>
<td>DC-149</td>
<td>Individual</td>
<td></td>
<td>Lloyd</td>
<td>Brandy</td>
<td>7/5/01</td>
<td>Salt Lake County</td>
<td>General, Wildlife</td>
</tr>
<tr>
<td>DC-150</td>
<td>Individual</td>
<td></td>
<td>Magar</td>
<td>Ruth</td>
<td>8/3/01</td>
<td>Unknown</td>
<td>Traffic and Parking</td>
</tr>
<tr>
<td>DC-151</td>
<td>Resident - Big Cottonwood Canyon</td>
<td>Heintz</td>
<td>Gary</td>
<td></td>
<td>7/1/01</td>
<td>Salt Lake County</td>
<td>Visual Quality, Alternatives, Recreation</td>
</tr>
<tr>
<td>DC-152</td>
<td>Individual</td>
<td></td>
<td>Fraizer</td>
<td>Christine</td>
<td>7/5/01</td>
<td>Salt Lake County</td>
<td>Purpose and Need, General</td>
</tr>
<tr>
<td>DC-153</td>
<td>Individual</td>
<td></td>
<td>Byrne</td>
<td>Gerry</td>
<td>7/5/01</td>
<td>Salt Lake County</td>
<td>General, Visual Quality</td>
</tr>
<tr>
<td>DC-154</td>
<td>Individual</td>
<td></td>
<td>Peterson</td>
<td>Barry</td>
<td>7/5/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-155</td>
<td>Individual</td>
<td></td>
<td>Pugsley</td>
<td>Mary Ellen</td>
<td>7/5/01</td>
<td>Unknown</td>
<td>Recreation, Traffic and Parking</td>
</tr>
<tr>
<td>DC-156</td>
<td>Individual</td>
<td></td>
<td>Leeds</td>
<td>Todd</td>
<td>6/29/01</td>
<td>Salt Lake County</td>
<td>Socioeconomics, Cumulative Effects, General</td>
</tr>
<tr>
<td>DC-157</td>
<td>Individual</td>
<td></td>
<td>Swanson</td>
<td>Fred</td>
<td>7/5/01</td>
<td>Salt Lake County</td>
<td>Category, Land Use and Plans</td>
</tr>
<tr>
<td>DC-158</td>
<td>Individual</td>
<td></td>
<td>Blankenship</td>
<td>Heidi</td>
<td>7/5/01</td>
<td>Outside Utah</td>
<td>General, Land Use and Plans, Socioeconomics</td>
</tr>
<tr>
<td>DC-159</td>
<td>Individual</td>
<td></td>
<td>Forrester</td>
<td>Alan</td>
<td>7/5/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-160</td>
<td>Resident - Big Cottonwood Canyon</td>
<td>Roberts</td>
<td>Kay</td>
<td></td>
<td>7/5/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-161</td>
<td>Resident - Big Cottonwood Canyon</td>
<td>Morgan</td>
<td>Nellie</td>
<td></td>
<td>7/6/01</td>
<td>Salt Lake County</td>
<td>Purpose and Need, Socioeconomics</td>
</tr>
<tr>
<td>DC-162</td>
<td>Individual</td>
<td></td>
<td>DiCello</td>
<td>Lou</td>
<td>7/6/01</td>
<td>Outside Utah</td>
<td>General</td>
</tr>
<tr>
<td>DC-163</td>
<td>Individual</td>
<td></td>
<td>Schmid</td>
<td>Gayanne</td>
<td>7/6/01</td>
<td>Salt Lake County</td>
<td>Socioeconomics, General</td>
</tr>
<tr>
<td>DC-164</td>
<td>Individual</td>
<td></td>
<td>Merrill</td>
<td>Dixon</td>
<td>7/6/01</td>
<td>Unknown</td>
<td>General, Air Quality, Water Quality</td>
</tr>
<tr>
<td>DC-165</td>
<td>Individual</td>
<td></td>
<td>Price</td>
<td>Tracey</td>
<td>7/7/01</td>
<td>Salt Lake County</td>
<td>General, Socioeconomics</td>
</tr>
<tr>
<td>Reference No.</td>
<td>Contact Type</td>
<td>Organization</td>
<td>Last Name</td>
<td>First Name</td>
<td>Date</td>
<td>Location</td>
<td>Categories</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------</td>
<td>--------------</td>
<td>-----------</td>
<td>------------</td>
<td>--------</td>
<td>------------------</td>
<td>------------------------------------------------</td>
</tr>
<tr>
<td>DC-166</td>
<td>Individual</td>
<td></td>
<td>Williams</td>
<td>Marian</td>
<td>7/5/01</td>
<td>Salt Lake County</td>
<td>Vegetation General</td>
</tr>
<tr>
<td>DC-167</td>
<td>Individual</td>
<td></td>
<td>Jones</td>
<td>Andy</td>
<td>8/3/01</td>
<td>Salt Lake County</td>
<td>Water Quality Wildlife Vegetation Wetland and Riparian Areas</td>
</tr>
<tr>
<td>DC-168</td>
<td>Resident - Big Cottonwood Canyon</td>
<td>Wittke</td>
<td>Mary</td>
<td></td>
<td>7/5/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-169</td>
<td>Individual</td>
<td></td>
<td>Sabey</td>
<td>Scott</td>
<td>7/5/01</td>
<td>Salt Lake County</td>
<td>Category Traffic and Parking Land Use and Plans</td>
</tr>
<tr>
<td>DC-170</td>
<td>Resident - Big Cottonwood Canyon</td>
<td>Louchheim</td>
<td>David</td>
<td></td>
<td>7/5/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-171</td>
<td>Individual</td>
<td></td>
<td>Yerzik</td>
<td>Jan</td>
<td>7/5/01</td>
<td>Summit County</td>
<td>General</td>
</tr>
<tr>
<td>DC-172</td>
<td>Individual</td>
<td></td>
<td>Wingert</td>
<td>Wayne</td>
<td>7/5/01</td>
<td>Unknown</td>
<td>General</td>
</tr>
<tr>
<td>DC-173</td>
<td>Resident - Big Cottonwood Canyon</td>
<td>Dorney</td>
<td>Richard</td>
<td></td>
<td>7/5/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-174</td>
<td>Individual</td>
<td></td>
<td>Polychronis</td>
<td>T. Kelly</td>
<td>7/5/01</td>
<td>Salt Lake County</td>
<td>Socioeconomics Purpose and Need Water Quality Land Use and Plans</td>
</tr>
<tr>
<td>DC-175</td>
<td>Corporation</td>
<td></td>
<td>Doyle</td>
<td>Zane</td>
<td>7/5/01</td>
<td>Salt Lake County</td>
<td>Land Use and Plans Recreation Socioeconomics</td>
</tr>
<tr>
<td>DC-176</td>
<td>Individual</td>
<td></td>
<td>Bevins</td>
<td>Earle</td>
<td>7/2/01</td>
<td>Salt Lake County</td>
<td>Recreation Socioeconomics</td>
</tr>
<tr>
<td>DC-177</td>
<td>Individual</td>
<td></td>
<td>Pierce</td>
<td>Camille</td>
<td>7/2/01</td>
<td>Salt Lake County</td>
<td>Cumulative Effects Socioeconomics Recreation</td>
</tr>
<tr>
<td>DC-178</td>
<td>Individual</td>
<td></td>
<td>Vogel</td>
<td>William</td>
<td>7/3/01</td>
<td>Salt Lake County</td>
<td>Land Use and Plans Socioeconomics</td>
</tr>
<tr>
<td>DC-179</td>
<td>Individual</td>
<td></td>
<td>Davies</td>
<td>Michael</td>
<td>7/3/01</td>
<td>Salt Lake County</td>
<td>Land Use and Plans Wildlife Recreation</td>
</tr>
<tr>
<td>DC-180</td>
<td>Individual</td>
<td></td>
<td>McLean</td>
<td>Andrew</td>
<td>7/3/01</td>
<td>Summit County</td>
<td>General Land Use and Plans Recreation</td>
</tr>
<tr>
<td>DC-181</td>
<td>Resident - Big Cottonwood Canyon</td>
<td>Grant</td>
<td>Sally</td>
<td></td>
<td>7/1/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-182</td>
<td>Individual</td>
<td></td>
<td>Gray</td>
<td>Laura</td>
<td>7/12/01</td>
<td>Salt Lake County</td>
<td>Socioeconomics Land Use and Plans</td>
</tr>
<tr>
<td>DC-183</td>
<td>Individual</td>
<td></td>
<td>Ziegler</td>
<td>Anne</td>
<td>6/30/01</td>
<td>Unknown</td>
<td>Purpose and Need Socioeconomics</td>
</tr>
<tr>
<td>DC-184</td>
<td>Individual</td>
<td></td>
<td>Rex</td>
<td>Teresa</td>
<td>6/28/01</td>
<td>Unknown</td>
<td>Alternatives Traffic and Parking</td>
</tr>
<tr>
<td>DC-185</td>
<td>Individual</td>
<td></td>
<td>Wiencke</td>
<td>Lawrence</td>
<td>6/28/01</td>
<td>Salt Lake County</td>
<td>Purpose and Need Recreation</td>
</tr>
<tr>
<td>Reference No.</td>
<td>Contact Type</td>
<td>Organization</td>
<td>Last Name</td>
<td>First Name</td>
<td>Date</td>
<td>Location</td>
<td>Categories</td>
</tr>
<tr>
<td>--------------</td>
<td>--------------</td>
<td>--------------</td>
<td>-----------</td>
<td>------------</td>
<td>------------</td>
<td>------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>DC-186</td>
<td>Individual</td>
<td>Brister</td>
<td>Bob</td>
<td>6/28/01</td>
<td>Salt Lake County</td>
<td>General</td>
<td></td>
</tr>
<tr>
<td>DC-187</td>
<td>Unsigned</td>
<td>Anonymous</td>
<td>Anonymous</td>
<td>6/28/01</td>
<td>Unknown</td>
<td>General</td>
<td>Recreation Purpose and Need Socioeconomics</td>
</tr>
<tr>
<td>DC-188</td>
<td>Individual</td>
<td>Doyle</td>
<td>Jason</td>
<td>6/6/01</td>
<td>Salt Lake County</td>
<td>General</td>
<td></td>
</tr>
<tr>
<td>DC-189</td>
<td>Individual</td>
<td>Albano</td>
<td>Thomas</td>
<td>6/5/01</td>
<td>Unknown</td>
<td>General</td>
<td>Socioeconomics</td>
</tr>
<tr>
<td>DC-190</td>
<td>Individual</td>
<td>Beers</td>
<td>Michael</td>
<td>6/22/01</td>
<td>Other Utah Counties</td>
<td>Geologic/Soils Wildlife Socioeconomics Water Quality</td>
<td></td>
</tr>
<tr>
<td>DC-191</td>
<td>Individual</td>
<td>Mitchell</td>
<td>Marcia</td>
<td>8/3/01</td>
<td>Salt Lake County</td>
<td>General</td>
<td></td>
</tr>
<tr>
<td>DC-192</td>
<td>Resident - Big Cottonwood Canyon</td>
<td>Williams</td>
<td>James</td>
<td>8/3/01</td>
<td>Salt Lake County</td>
<td>Water Quality Cumulative Effects</td>
<td></td>
</tr>
<tr>
<td>DC-193</td>
<td>Individual</td>
<td>Hughes</td>
<td>Gary</td>
<td>7/5/01</td>
<td>Salt Lake County</td>
<td>General</td>
<td>Land Use and Plans General</td>
</tr>
<tr>
<td>DC-194</td>
<td>Individual</td>
<td>Watts</td>
<td>Joe</td>
<td>7/6/01</td>
<td>Salt Lake County</td>
<td>General</td>
<td></td>
</tr>
<tr>
<td>DC-195</td>
<td>Individual</td>
<td>Breslawski</td>
<td>Jackie</td>
<td>7/6/01</td>
<td>Salt Lake County</td>
<td>Water Quality Wildlife Traffic and Parking Cumulative Effects</td>
<td></td>
</tr>
<tr>
<td>DC-196</td>
<td>Individual</td>
<td>Delrossi</td>
<td>Yvonne</td>
<td>8/3/01</td>
<td>Salt Lake County</td>
<td>Vegetation General</td>
<td></td>
</tr>
<tr>
<td>DC-197</td>
<td>Individual</td>
<td>Bennion</td>
<td>Don</td>
<td>7/4/01</td>
<td>Salt Lake County</td>
<td>General</td>
<td></td>
</tr>
<tr>
<td>DC-198</td>
<td>Individual</td>
<td>Irvine</td>
<td>Ray</td>
<td>8/3/01</td>
<td>Other Utah Counties</td>
<td>General</td>
<td></td>
</tr>
<tr>
<td>DC-199</td>
<td>Individual</td>
<td>Estes</td>
<td>JLB</td>
<td>7/9/01</td>
<td>Unknown</td>
<td>General</td>
<td></td>
</tr>
<tr>
<td>DC-200</td>
<td>Individual</td>
<td>Polevoy</td>
<td>Leonid</td>
<td>7/6/01</td>
<td>Salt Lake County</td>
<td>Recreation General</td>
<td></td>
</tr>
<tr>
<td>DC-201</td>
<td>Individual</td>
<td>Brinley</td>
<td>Eldon</td>
<td>7/5/01</td>
<td>Salt Lake County</td>
<td>General</td>
<td></td>
</tr>
<tr>
<td>DC-202</td>
<td>Individual</td>
<td>Neilhart</td>
<td>Mark</td>
<td>7/6/01</td>
<td>Salt Lake County</td>
<td>General</td>
<td>Land Use and Plans Socioeconomics</td>
</tr>
<tr>
<td>DC-203</td>
<td>Individual</td>
<td>Thompson</td>
<td>Angela</td>
<td>7/5/01</td>
<td>Unknown</td>
<td>General</td>
<td>Socioeconomics</td>
</tr>
<tr>
<td>DC-204</td>
<td>Resident - Big Cottonwood Canyon</td>
<td>Fiederlein</td>
<td>John</td>
<td>6/29/01</td>
<td>Outside Utah</td>
<td>General</td>
<td></td>
</tr>
<tr>
<td>DC-205</td>
<td>Individual</td>
<td>Fikmel</td>
<td>Wilma</td>
<td>7/5/01</td>
<td>Salt Lake County</td>
<td>General</td>
<td></td>
</tr>
<tr>
<td>DC-206</td>
<td>Individual</td>
<td>Fenjow</td>
<td>Darrin</td>
<td>7/9/01</td>
<td>Unknown</td>
<td>General</td>
<td></td>
</tr>
<tr>
<td>DC-207</td>
<td>Individual</td>
<td>Duda</td>
<td>Raymond</td>
<td>7/5/01</td>
<td>Salt Lake County</td>
<td>General</td>
<td></td>
</tr>
<tr>
<td>DC-208</td>
<td>Individual</td>
<td>Athey</td>
<td>Robert</td>
<td>8/3/01</td>
<td>Salt Lake County</td>
<td>Cumulative Effects Traffic and Parking Purpose and Need Wildlife Socioeconomics Recreation Water Quality</td>
<td></td>
</tr>
<tr>
<td>DC-209</td>
<td>Individual</td>
<td>Leonard</td>
<td>Jan</td>
<td>6/26/01</td>
<td>Salt Lake County</td>
<td>General</td>
<td></td>
</tr>
<tr>
<td>DC-210</td>
<td>Individual</td>
<td>Coffman</td>
<td>Scott</td>
<td>6/26/01</td>
<td>Salt Lake County</td>
<td>General</td>
<td></td>
</tr>
<tr>
<td>DC-211</td>
<td>Individual</td>
<td>Beeley</td>
<td>Mike</td>
<td>7/3/01</td>
<td>Summit County</td>
<td>General</td>
<td></td>
</tr>
<tr>
<td>Reference No.</td>
<td>Contact Type</td>
<td>Organization</td>
<td>Last Name</td>
<td>First Name</td>
<td>Date</td>
<td>Location</td>
<td>Categories</td>
</tr>
<tr>
<td>---------------</td>
<td>--------------</td>
<td>---------------</td>
<td>-----------</td>
<td>------------</td>
<td>------------</td>
<td>---------------------</td>
<td>------------------------------------</td>
</tr>
<tr>
<td>DC-212</td>
<td>Individual</td>
<td>Oberlander</td>
<td>Russ</td>
<td></td>
<td>6/26/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-213</td>
<td>Individual</td>
<td>Blair</td>
<td>Bruce</td>
<td></td>
<td>7/3/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-214</td>
<td>Individual</td>
<td>Memmott</td>
<td>Mike</td>
<td></td>
<td>6/26/01</td>
<td>Other Utah Counties</td>
<td>General</td>
</tr>
<tr>
<td>DC-215</td>
<td>Individual</td>
<td>Skylling</td>
<td>Carl</td>
<td></td>
<td>7/3/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-216</td>
<td>Individual</td>
<td>McDonald</td>
<td>Tanya</td>
<td></td>
<td>6/26/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-217</td>
<td>Individual</td>
<td>Lund</td>
<td>Alice</td>
<td></td>
<td>7/7/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-218</td>
<td>Individual</td>
<td>Knorr</td>
<td>Uli</td>
<td></td>
<td>7/5/01</td>
<td>Salt Lake County</td>
<td>Purpose and Need</td>
</tr>
<tr>
<td>DC-219</td>
<td>Individual</td>
<td>Podolsky</td>
<td>Nano</td>
<td></td>
<td>7/10/01</td>
<td>Unknown</td>
<td>Traffic and Parking</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Land Use and Plans Purpose and Need</td>
</tr>
<tr>
<td>DC-220</td>
<td>Individual</td>
<td>Pappas</td>
<td>George</td>
<td></td>
<td>7/4/01</td>
<td>Unknown</td>
<td>General</td>
</tr>
<tr>
<td>DC-221</td>
<td>Resident - Big Cottonwood Canyon</td>
<td>Kronenberger</td>
<td>Robert</td>
<td></td>
<td>6/20/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-222</td>
<td>Individual</td>
<td>Rector</td>
<td>Daniel</td>
<td></td>
<td>7/11/01</td>
<td>Salt Lake County</td>
<td>Land Use and Plans NEPA Process/Forest Plan</td>
</tr>
<tr>
<td>DC-223</td>
<td>Individual</td>
<td>Light</td>
<td>Avis</td>
<td></td>
<td>7/14/01</td>
<td>Salt Lake County</td>
<td>Socioeconomics Purpose and Need Utilities Land Use and Plans</td>
</tr>
<tr>
<td>DC-224</td>
<td>Individual</td>
<td>Dewey</td>
<td>Jon</td>
<td></td>
<td>8/3/01</td>
<td>Unknown</td>
<td>General</td>
</tr>
<tr>
<td>DC-225</td>
<td>Individual</td>
<td>Seidman</td>
<td>Ira</td>
<td></td>
<td>6/23/01</td>
<td>Unknown</td>
<td>General</td>
</tr>
<tr>
<td>DC-226</td>
<td>Individual</td>
<td>Miller</td>
<td>R</td>
<td></td>
<td>7/12/01</td>
<td>Salt Lake County</td>
<td>Vegetation General Alternatives</td>
</tr>
<tr>
<td>DC-227</td>
<td>Individual</td>
<td>Geremy</td>
<td>Lana</td>
<td></td>
<td>7/8/01</td>
<td>Unknown</td>
<td>Socioeconomics</td>
</tr>
<tr>
<td>DC-228</td>
<td>Conservation/ Environmental Group</td>
<td>Citizens' Committee to Save our Canyons</td>
<td>Noyes</td>
<td>Gavin</td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>Land Use and Plans Purpose and Need Socioeconomics Recreation</td>
</tr>
<tr>
<td>DC-229</td>
<td>Resident - Big Cottonwood Canyon</td>
<td>Bogan</td>
<td>Andrew</td>
<td></td>
<td>7/10/01</td>
<td>Outside Utah</td>
<td>General</td>
</tr>
<tr>
<td>DC-230</td>
<td>Individual</td>
<td>Bogan</td>
<td>Elizabeth</td>
<td></td>
<td>7/12/01</td>
<td>Outside Utah</td>
<td>General</td>
</tr>
<tr>
<td>DC-231</td>
<td>Individual</td>
<td>Clarerhout</td>
<td>Scott</td>
<td></td>
<td>7/26/01</td>
<td>Salt Lake County</td>
<td>Purpose and Need Socioeconomics Land Use and Plans Cumulative Effects</td>
</tr>
<tr>
<td>DC-232</td>
<td>Individual</td>
<td>Burn</td>
<td>Mrs. William</td>
<td></td>
<td>7/17/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-233</td>
<td>Individual</td>
<td>Marce</td>
<td>Roger</td>
<td></td>
<td>7/17/01</td>
<td>Outside Utah</td>
<td>General</td>
</tr>
<tr>
<td>DC-234</td>
<td>Individual</td>
<td>Moffat</td>
<td>Diane</td>
<td></td>
<td>7/8/01</td>
<td>Salt Lake County</td>
<td>Socioeconomics</td>
</tr>
<tr>
<td>DC-235</td>
<td>Individual</td>
<td>Undecipherabl</td>
<td>Undecipherabl</td>
<td></td>
<td>7/8/01</td>
<td>Unknown</td>
<td>Socioeconomics</td>
</tr>
<tr>
<td>DC-236</td>
<td>Resident - Big Cottonwood Canyon</td>
<td>Cushing</td>
<td>J. W.</td>
<td></td>
<td>7/10/01</td>
<td>Salt Lake County</td>
<td>Water Quality Vegetation Visual Quality</td>
</tr>
<tr>
<td>DC-237</td>
<td>Individual</td>
<td>Bostrom</td>
<td>Eric</td>
<td></td>
<td>7/13/01</td>
<td>Other Utah Counties</td>
<td>General</td>
</tr>
<tr>
<td>DC-238</td>
<td>Petition</td>
<td>Moore</td>
<td>Joe</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-239</td>
<td>Petition</td>
<td>Erickson</td>
<td>John</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>Reference No.</td>
<td>Contact Type</td>
<td>Organization</td>
<td>Last Name</td>
<td>First Name</td>
<td>Date</td>
<td>Location</td>
<td>Categories</td>
</tr>
<tr>
<td>--------------</td>
<td>--------------</td>
<td>--------------</td>
<td>-----------</td>
<td>------------</td>
<td>--------</td>
<td>---------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>DC-240</td>
<td>Petition</td>
<td>Esplin</td>
<td>Jan</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-241</td>
<td>Petition</td>
<td>Bley</td>
<td>Steven</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-242</td>
<td>Petition</td>
<td>Hyatt</td>
<td>Ken</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-243</td>
<td>Petition</td>
<td>Sabol</td>
<td>Candace</td>
<td></td>
<td>7/9/01</td>
<td>Other Utah Counties</td>
<td>General</td>
</tr>
<tr>
<td>DC-244</td>
<td>Petition</td>
<td>Boyd</td>
<td>Larry</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-245</td>
<td>Resident - Big Cottonwood Canyon</td>
<td>Hileyer</td>
<td>Barbara</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-246</td>
<td>Petition</td>
<td>Gonzales</td>
<td>Tara</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-247</td>
<td>Petition</td>
<td>Neville</td>
<td>Chris</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-248</td>
<td>Petition</td>
<td>Roberts</td>
<td>Todd</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-249</td>
<td>Petition</td>
<td>Albers</td>
<td>Starleen</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-250</td>
<td>Petition</td>
<td>Brandt</td>
<td>Kelsey</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-251</td>
<td>Petition</td>
<td>Brown</td>
<td>Randall</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-252</td>
<td>Petition</td>
<td>Britz</td>
<td>Dorothy</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-253</td>
<td>Individual</td>
<td>Bintz</td>
<td>Charles</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-254</td>
<td>Petition</td>
<td>Flannigan</td>
<td>Kirk</td>
<td></td>
<td>7/9/01</td>
<td>Unknown</td>
<td>Recreation Traffic and Parking General</td>
</tr>
<tr>
<td>DC-255</td>
<td>Individual</td>
<td>Pertl</td>
<td>Audrey</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-256</td>
<td>Resident - Big Cottonwood Canyon</td>
<td>Canny</td>
<td>Carlyn</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>Water Quality General</td>
</tr>
<tr>
<td>DC-257</td>
<td>Resident - Big Cottonwood Canyon</td>
<td>Goeringer</td>
<td>Bryane</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>Land Use and Plans General</td>
</tr>
<tr>
<td>DC-258</td>
<td>Resident - Big Cottonwood Canyon</td>
<td>Hadley</td>
<td>Joan</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-259</td>
<td>Petition</td>
<td>Fife</td>
<td>Scott</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-260</td>
<td>Petition</td>
<td>Drenk</td>
<td>Daniel</td>
<td></td>
<td>7/9/01</td>
<td>Other Utah Counties</td>
<td>General</td>
</tr>
<tr>
<td>DC-261</td>
<td>Petition</td>
<td>Fassil</td>
<td>B.</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-262</td>
<td>Petition</td>
<td>Parry</td>
<td>Anne</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-263</td>
<td>Resident - Big Cottonwood Canyon</td>
<td>Goeringer</td>
<td>Suzie</td>
<td></td>
<td>7/9/01</td>
<td>Outside Utah</td>
<td>General</td>
</tr>
<tr>
<td>DC-264</td>
<td>Petition</td>
<td>Leigh</td>
<td>Linda</td>
<td></td>
<td>7/9/01</td>
<td>Outside Utah</td>
<td>General</td>
</tr>
<tr>
<td>DC-265</td>
<td>Petition</td>
<td>Jones</td>
<td>Rob</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-266</td>
<td>Petition</td>
<td>Dolph</td>
<td>Deb</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-267</td>
<td>Petition</td>
<td>Schaefer</td>
<td>Diane</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-268</td>
<td>Resident - Big Cottonwood Canyon</td>
<td>Palmer</td>
<td>Luther</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-269</td>
<td>Petition</td>
<td>Brunvand</td>
<td>Amy</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-270</td>
<td>Individual</td>
<td>Light</td>
<td>Avis</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General Utilities</td>
</tr>
<tr>
<td>DC-271</td>
<td>Petition</td>
<td>Hallenbeck</td>
<td>Lannlee</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-272</td>
<td>Petition</td>
<td>Christensen</td>
<td>Craig</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>Reference No.</td>
<td>Contact Type</td>
<td>Organization</td>
<td>Last Name</td>
<td>First Name</td>
<td>Date</td>
<td>Location</td>
<td>Categories</td>
</tr>
<tr>
<td>--------------</td>
<td>--------------</td>
<td>--------------</td>
<td>-----------</td>
<td>------------</td>
<td>---------</td>
<td>-------------</td>
<td>--------------</td>
</tr>
<tr>
<td>DC-273</td>
<td>Petition</td>
<td></td>
<td>Lensch</td>
<td>Brian</td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-274</td>
<td>Resident - Big Cottonwood Canyon</td>
<td></td>
<td>Lambert</td>
<td>Neal</td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-275</td>
<td>Petition</td>
<td></td>
<td>Nordstrom</td>
<td>Rebekah</td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-276</td>
<td>Petition</td>
<td></td>
<td>Hendrian</td>
<td>Julia</td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-277</td>
<td>Petition</td>
<td></td>
<td>Jones</td>
<td>Rob</td>
<td>7/12/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-278</td>
<td>Petition</td>
<td></td>
<td>Nensen</td>
<td>Jon</td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-279</td>
<td>Petition</td>
<td></td>
<td>Norton</td>
<td>Joan</td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-280</td>
<td>Petition</td>
<td></td>
<td>Driver</td>
<td>Jenny</td>
<td>7/9/01</td>
<td>Outside Utah</td>
<td>General</td>
</tr>
<tr>
<td>DC-281</td>
<td>Petition</td>
<td></td>
<td>Ahlert</td>
<td>Jeffrey</td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-282</td>
<td>Petition</td>
<td></td>
<td>Hong</td>
<td>Mathew</td>
<td>7/9/01</td>
<td>Other Utah Counties</td>
<td>General</td>
</tr>
<tr>
<td>DC-283</td>
<td>Petition</td>
<td></td>
<td>Muije</td>
<td>Liz</td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-284</td>
<td>Petition</td>
<td></td>
<td>Troxell</td>
<td>Dean</td>
<td>7/9/01</td>
<td>Outside Utah</td>
<td>General</td>
</tr>
<tr>
<td>DC-285</td>
<td>Petition</td>
<td></td>
<td>Green</td>
<td>Karen</td>
<td>7/16/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-286</td>
<td>Petition</td>
<td></td>
<td>Tonin</td>
<td>Christina</td>
<td>7/16/01</td>
<td>Outside Utah</td>
<td>General</td>
</tr>
<tr>
<td>DC-287</td>
<td>Petition</td>
<td></td>
<td>Foster</td>
<td>Paula</td>
<td>7/16/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-288</td>
<td>Petition</td>
<td></td>
<td>Wright</td>
<td>Sarah</td>
<td>7/16/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-289</td>
<td>Petition</td>
<td></td>
<td>Butler</td>
<td>Charles</td>
<td>7/16/01</td>
<td>Summit County</td>
<td>General</td>
</tr>
<tr>
<td>DC-290</td>
<td>Petition</td>
<td></td>
<td>Van Benthoysen</td>
<td>John</td>
<td>7/9/01</td>
<td>Outside Utah</td>
<td>General</td>
</tr>
<tr>
<td>DC-291</td>
<td>Petition</td>
<td></td>
<td>Sherman</td>
<td>Susan</td>
<td>7/7/01</td>
<td>Outside Utah</td>
<td>General</td>
</tr>
<tr>
<td>DC-292</td>
<td>Petition</td>
<td></td>
<td>Wasburton</td>
<td>Anne</td>
<td>7/9/01</td>
<td>Summit County</td>
<td>General</td>
</tr>
<tr>
<td>DC-293</td>
<td>Petition</td>
<td></td>
<td>Bacasa</td>
<td>Corrie</td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-294</td>
<td>Petition</td>
<td></td>
<td>Bernal</td>
<td>Bess</td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-295</td>
<td>Petition</td>
<td></td>
<td>Hahr</td>
<td>Med</td>
<td>9/9/01</td>
<td>Outside Utah</td>
<td>General</td>
</tr>
<tr>
<td>DC-296</td>
<td>Petition</td>
<td></td>
<td>Shaw</td>
<td>Sidney</td>
<td>7/9/01</td>
<td>Outside Utah</td>
<td>General</td>
</tr>
<tr>
<td>DC-297</td>
<td>Petition</td>
<td></td>
<td>Anderson</td>
<td>Andy</td>
<td>7/9/01</td>
<td>Outside Utah</td>
<td>General</td>
</tr>
<tr>
<td>DC-298</td>
<td>Petition</td>
<td></td>
<td>Vitale</td>
<td>Susan</td>
<td>7/9/01</td>
<td>Outside Utah</td>
<td>General</td>
</tr>
<tr>
<td>DC-299</td>
<td>Petition</td>
<td></td>
<td>Bruner</td>
<td>Susan</td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-300</td>
<td>Petition</td>
<td></td>
<td>Luker</td>
<td>Deborah</td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-301</td>
<td>Petition</td>
<td></td>
<td>Van Winkle</td>
<td>Steve</td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-302</td>
<td>Petition</td>
<td></td>
<td>Brickey</td>
<td>Robert</td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-303</td>
<td>Petition</td>
<td></td>
<td>Bryson</td>
<td>Lynn</td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-304</td>
<td>Petition</td>
<td></td>
<td>Standing</td>
<td>Michael</td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-305</td>
<td>Petition</td>
<td></td>
<td>Shuput</td>
<td>Ryan</td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-306</td>
<td>Petition</td>
<td></td>
<td>Lynch</td>
<td>Rom</td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-307</td>
<td>Petition</td>
<td></td>
<td>Tonin</td>
<td>Roger</td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-308</td>
<td>Petition</td>
<td></td>
<td>Lynch</td>
<td>Rom</td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-309</td>
<td>Petition</td>
<td></td>
<td>Richardson</td>
<td>Robert</td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-310</td>
<td>Petition</td>
<td></td>
<td>Richardson</td>
<td>Deedee</td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-311</td>
<td>Petition</td>
<td></td>
<td>Robinson</td>
<td>Kirk</td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-312</td>
<td>Petition</td>
<td></td>
<td>Richards</td>
<td>William</td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-313</td>
<td>Petition</td>
<td></td>
<td>Gaia</td>
<td>Paul</td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-314</td>
<td>Petition</td>
<td></td>
<td>Swinyard</td>
<td>Richard</td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Grable</td>
<td>Bruce</td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>Reference No.</td>
<td>Contact Type</td>
<td>Organization</td>
<td>Last Name</td>
<td>First Name</td>
<td>Date</td>
<td>Location</td>
<td>Categories</td>
</tr>
<tr>
<td>--------------</td>
<td>--------------</td>
<td>--------------</td>
<td>-----------</td>
<td>------------</td>
<td>--------</td>
<td>-----------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>DC-315</td>
<td>Petition</td>
<td>Beck</td>
<td>Audrey</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-316</td>
<td>Petition</td>
<td>Luther</td>
<td>Ada</td>
<td></td>
<td>7/9/01</td>
<td>Wasatch County</td>
<td>General</td>
</tr>
<tr>
<td>DC-317</td>
<td>Petition</td>
<td>Azzolina</td>
<td>David</td>
<td></td>
<td>7/9/01</td>
<td>Outside Utah</td>
<td>General</td>
</tr>
<tr>
<td>DC-318</td>
<td>Petition</td>
<td>Hall</td>
<td>Jordan</td>
<td></td>
<td>7/9/01</td>
<td>Other Utah Counties</td>
<td>General</td>
</tr>
<tr>
<td>DC-319</td>
<td>Petition</td>
<td>Arnder</td>
<td>Angela</td>
<td></td>
<td>7/9/01</td>
<td>Summit County</td>
<td>General</td>
</tr>
<tr>
<td>DC-320</td>
<td>Petition</td>
<td>Matthes</td>
<td>Magdalena</td>
<td></td>
<td>7/9/01</td>
<td>Summit County</td>
<td>General</td>
</tr>
<tr>
<td>DC-321</td>
<td>Individual</td>
<td>Holmberg</td>
<td>Jennifer</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-322</td>
<td>Petition</td>
<td>Olsen</td>
<td>Kathy</td>
<td></td>
<td>7/9/01</td>
<td>Outside Utah</td>
<td>General</td>
</tr>
<tr>
<td>DC-323</td>
<td>Petition</td>
<td>Moser</td>
<td>Helen</td>
<td></td>
<td>7/9/01</td>
<td>Outside Utah</td>
<td>General</td>
</tr>
<tr>
<td>DC-324</td>
<td>Petition</td>
<td>Saronita</td>
<td>Kathy</td>
<td></td>
<td>7/9/01</td>
<td>Summit County</td>
<td>General</td>
</tr>
<tr>
<td>DC-325</td>
<td>Petition</td>
<td>Bell</td>
<td>Stefan</td>
<td></td>
<td>7/9/01</td>
<td>Unknown</td>
<td>General</td>
</tr>
<tr>
<td>DC-326</td>
<td>Petition</td>
<td>Edmisten</td>
<td>Scott</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-327</td>
<td>Petition</td>
<td>Moser</td>
<td>Gerard</td>
<td></td>
<td>7/9/01</td>
<td>Outside Utah</td>
<td>General</td>
</tr>
<tr>
<td>DC-328</td>
<td>Petition</td>
<td>Evans</td>
<td>John</td>
<td></td>
<td>7/9/01</td>
<td>Other Utah Counties</td>
<td>General</td>
</tr>
<tr>
<td>DC-329</td>
<td>Petition</td>
<td>West</td>
<td>Jason</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-330</td>
<td>Petition</td>
<td>Harenz</td>
<td>Charles</td>
<td></td>
<td>7/9/01</td>
<td>Outside Utah</td>
<td>General</td>
</tr>
<tr>
<td>DC-331</td>
<td>Petition</td>
<td>Groenewold</td>
<td>Jason</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-332</td>
<td>Petition</td>
<td>Jones</td>
<td>Allison</td>
<td></td>
<td>7/9/01</td>
<td>Other Utah Counties</td>
<td>General</td>
</tr>
<tr>
<td>DC-333</td>
<td>Petition</td>
<td>Lynch</td>
<td>Eric</td>
<td></td>
<td>7/9/01</td>
<td>Outside Utah</td>
<td>General</td>
</tr>
<tr>
<td>DC-334</td>
<td>Petition</td>
<td>Lagasse</td>
<td>Daphne</td>
<td></td>
<td>7/9/01</td>
<td>Outside Utah</td>
<td>General</td>
</tr>
<tr>
<td>DC-335</td>
<td>Petition</td>
<td>Wilson</td>
<td>Susanna</td>
<td></td>
<td>7/9/01</td>
<td>Outside Utah</td>
<td>General</td>
</tr>
<tr>
<td>DC-336</td>
<td>Petition</td>
<td>Bockstra</td>
<td>Erin</td>
<td></td>
<td>7/9/01</td>
<td>Outside Utah</td>
<td>General</td>
</tr>
<tr>
<td>DC-337</td>
<td>Petition</td>
<td>Soref</td>
<td>Wendy</td>
<td></td>
<td>7/9/01</td>
<td>Outside Utah</td>
<td>General</td>
</tr>
<tr>
<td>DC-338</td>
<td>Petition</td>
<td>Ferry</td>
<td>Theresa</td>
<td></td>
<td>7/9/01</td>
<td>Outside Utah</td>
<td>General</td>
</tr>
<tr>
<td>DC-339</td>
<td>Petition</td>
<td>Martin</td>
<td>Allegra</td>
<td></td>
<td>7/9/01</td>
<td>Outside Utah</td>
<td>General</td>
</tr>
<tr>
<td>DC-340</td>
<td>Petition</td>
<td>Bosner</td>
<td>Ram Kumar</td>
<td></td>
<td>7/9/01</td>
<td>Outside Utah</td>
<td>General</td>
</tr>
<tr>
<td>DC-341</td>
<td>Petition</td>
<td>Holt</td>
<td>Christopher</td>
<td></td>
<td>7/9/01</td>
<td>Outside Utah</td>
<td>General</td>
</tr>
<tr>
<td>DC-342</td>
<td>Petition</td>
<td>Fletcher</td>
<td>Victoria</td>
<td></td>
<td>7/9/01</td>
<td>Outside Utah</td>
<td>General</td>
</tr>
<tr>
<td>DC-343</td>
<td>Petition</td>
<td>Nappier</td>
<td>Sharon</td>
<td></td>
<td>7/9/01</td>
<td>Outside Utah</td>
<td>General</td>
</tr>
<tr>
<td>DC-344</td>
<td>Petition</td>
<td>Popper</td>
<td>Juliana</td>
<td></td>
<td>7/9/01</td>
<td>Outside Utah</td>
<td>General</td>
</tr>
<tr>
<td>DC-345</td>
<td>Petition</td>
<td>Gibbard</td>
<td>Tressa</td>
<td></td>
<td>7/9/01</td>
<td>Outside Utah</td>
<td>General</td>
</tr>
<tr>
<td>DC-346</td>
<td>Petition</td>
<td>Fletcher</td>
<td>Joe</td>
<td></td>
<td>7/9/01</td>
<td>Outside Utah</td>
<td>General</td>
</tr>
<tr>
<td>DC-347</td>
<td>Petition</td>
<td>Schultz</td>
<td>Catherine</td>
<td></td>
<td>7/9/01</td>
<td>Outside Utah</td>
<td>General</td>
</tr>
<tr>
<td>DC-348</td>
<td>Petition</td>
<td>Amodeo</td>
<td>Kji</td>
<td></td>
<td>7/9/01</td>
<td>Outside Utah</td>
<td>General</td>
</tr>
<tr>
<td>DC-349</td>
<td>Petition</td>
<td>Donner</td>
<td>T.</td>
<td></td>
<td>7/9/01</td>
<td>Outside Utah</td>
<td>General</td>
</tr>
<tr>
<td>DC-350</td>
<td>Petition</td>
<td>Wilder</td>
<td>Melissa</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-351</td>
<td>Petition</td>
<td>Rypkenna</td>
<td>Travis</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-352</td>
<td>Petition</td>
<td>Unknown</td>
<td></td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-353</td>
<td>Petition</td>
<td>Wood</td>
<td>Gregory</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-354</td>
<td>Petition</td>
<td>Andrews</td>
<td>John</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-355</td>
<td>Petition</td>
<td>Battad</td>
<td>Lynette</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-356</td>
<td>Petition</td>
<td>Roach</td>
<td>Michelle</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-357</td>
<td>Petition</td>
<td>Davis</td>
<td>Liz</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-358</td>
<td>Petition</td>
<td>Swinyard</td>
<td>DuAnn</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>Reference No.</td>
<td>Contact Type</td>
<td>Organization</td>
<td>Last Name</td>
<td>First Name</td>
<td>Date</td>
<td>Location</td>
<td>Categories</td>
</tr>
<tr>
<td>--------------</td>
<td>--------------</td>
<td>--------------</td>
<td>-----------</td>
<td>------------</td>
<td>------------</td>
<td>--------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>DC-359</td>
<td>Petition</td>
<td>Swinyard</td>
<td>James</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-360</td>
<td>Petition</td>
<td>Manning</td>
<td>Ann</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-361</td>
<td>Petition</td>
<td>Brown</td>
<td>Kim</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-362</td>
<td>Petition</td>
<td>Alexander</td>
<td>Karen</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-363</td>
<td>Petition</td>
<td>Schumann</td>
<td>Todd</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-364</td>
<td>Petition</td>
<td>Reveley</td>
<td>Chris</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-365</td>
<td>Petition</td>
<td>Lefflang</td>
<td>Miriam</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-366</td>
<td>Petition</td>
<td>Walkingshaw</td>
<td>Nole</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-367</td>
<td>Petition</td>
<td>Hudson</td>
<td>Brad</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-368</td>
<td>Petition</td>
<td>Glenn</td>
<td>Elaine</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-369</td>
<td>Petition</td>
<td>Elsted</td>
<td>Sabrina</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-370</td>
<td>Petition</td>
<td>Marston</td>
<td>Michael</td>
<td></td>
<td>7/9/01</td>
<td>Outside Utah</td>
<td>General</td>
</tr>
<tr>
<td>DC-371</td>
<td>Petition</td>
<td>Foster</td>
<td>Thomas</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-372</td>
<td>Petition</td>
<td>Bennett</td>
<td>Leeloo</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-373</td>
<td>Petition</td>
<td>Leslie</td>
<td>Don</td>
<td></td>
<td>7/9/01</td>
<td>Other Utah Counties</td>
<td>General</td>
</tr>
<tr>
<td>DC-374</td>
<td>Petition</td>
<td>Lee</td>
<td>Tonia</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-375</td>
<td>Petition</td>
<td>Williams</td>
<td>Rene</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-376</td>
<td>Petition</td>
<td>Lindstrom</td>
<td>Sarah</td>
<td></td>
<td>7/9/01</td>
<td>Other Utah Counties</td>
<td>General</td>
</tr>
<tr>
<td>DC-377</td>
<td>Petition</td>
<td>Bennett</td>
<td>Glenn</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-378</td>
<td>Petition</td>
<td>Freeman</td>
<td>Joanie</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-379</td>
<td>Petition</td>
<td>Jackson</td>
<td>Riley</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-380</td>
<td>Petition</td>
<td>Orine</td>
<td>Joseph</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-381</td>
<td>Petition</td>
<td>Ray</td>
<td>Andrew</td>
<td></td>
<td>7/9/01</td>
<td>Outside Utah</td>
<td>General</td>
</tr>
<tr>
<td>DC-382</td>
<td>Petition</td>
<td>Brooks</td>
<td>Banjamin</td>
<td></td>
<td>7/9/01</td>
<td>Outside Utah</td>
<td>General</td>
</tr>
<tr>
<td>DC-383</td>
<td>Petition</td>
<td>Korb</td>
<td>Jennifer</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-384</td>
<td>Petition</td>
<td>Becker</td>
<td>Robert</td>
<td></td>
<td>7/9/01</td>
<td>Other Utah Counties</td>
<td>General</td>
</tr>
<tr>
<td>DC-385</td>
<td>Petition</td>
<td>Palmer</td>
<td>Derick</td>
<td></td>
<td>7/9/01</td>
<td>Other Utah Counties</td>
<td>General</td>
</tr>
<tr>
<td>DC-386</td>
<td>Petition</td>
<td>Mathews</td>
<td>Roxanne</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-387</td>
<td>Petition</td>
<td>Haarman</td>
<td>William</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-388</td>
<td>Petition</td>
<td>Hanson</td>
<td>Brandon</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-389</td>
<td>Petition</td>
<td>Dall</td>
<td>Amy</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-390</td>
<td>Petition</td>
<td>Dunn</td>
<td>Kari</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-391</td>
<td>Petition</td>
<td>Barlage</td>
<td>Brad</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-392</td>
<td>Petition</td>
<td>Unknown</td>
<td>Unknown</td>
<td></td>
<td>7/9/01</td>
<td>Salt Lake County</td>
<td>General</td>
</tr>
<tr>
<td>DC-393</td>
<td>Petition</td>
<td>Kraunz</td>
<td>Stephen</td>
<td></td>
<td>7/9/01</td>
<td>Other Utah Counties</td>
<td>General</td>
</tr>
<tr>
<td>DC-394</td>
<td>Individual</td>
<td>Wilcox</td>
<td>Sylvia</td>
<td></td>
<td>9/27/01</td>
<td>Salt Lake County</td>
<td>General Purpose and Need</td>
</tr>
<tr>
<td>DC-395</td>
<td>Individual</td>
<td>Orra</td>
<td>Madeline</td>
<td></td>
<td>10/4/01</td>
<td>Outside Utah</td>
<td>General</td>
</tr>
</tbody>
</table>
CHAPTER 2.0
SUMMARY OF COMMENT LETTERS

2.1 SUMMARY OF PUBLIC COMMENTS

The Salt Lake Ranger District Office of the Wasatch-Cache National Forest received a total of 395 written comments including letters, reports, emails and petition forms on the Solitude Mountain Resort Master Development Plan Update DEIS during the 61 day comment period. Of the 395 total comments, the Forest Service received 249 comments as letters, reports or emails. Of these, residents of Big Cottonwood Canyon submitted 53 comments. The contents analysis evaluation involved a review of comments, assignment of subject categories, identification of substantive comments, grouping of similar comments, and preparation of comments for resource specialist response. In addition, data on DEIS Alternative preferences and general opposition or support was tabulated to allow inference of overall public opinion on the Solitude MDP Update proposal and DEIS.

Written comments came from agencies, organizations, individuals, the applicant, and others. Table 2-1 provides a breakdown of the source of the comments received. Table 2-2 presents the geographic distribution of comments in terms of residence.

<table>
<thead>
<tr>
<th>Source</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unsigned (U)</td>
<td>1</td>
<td>0.25%</td>
</tr>
<tr>
<td>Individual (I)</td>
<td>176</td>
<td>44.78%</td>
</tr>
<tr>
<td>Conservation/Environmental Group (CE)</td>
<td>3</td>
<td>0.76%</td>
</tr>
<tr>
<td>Other Group/Organization (OG)</td>
<td>3</td>
<td>0.76%</td>
</tr>
<tr>
<td>Applicant or its Representative (AP)</td>
<td>4</td>
<td>1.02%</td>
</tr>
<tr>
<td>Local Government (LG)</td>
<td>2</td>
<td>0.51%</td>
</tr>
<tr>
<td>State Agency (SA)</td>
<td>1</td>
<td>0.25%</td>
</tr>
<tr>
<td>Federal Agency (FA)</td>
<td>2</td>
<td>0.51%</td>
</tr>
<tr>
<td>Petition (PT)</td>
<td>144</td>
<td>36.64%</td>
</tr>
<tr>
<td>Resident – Big Cottonwood Canyon (RBCC)</td>
<td>53</td>
<td>13.49%</td>
</tr>
<tr>
<td>Corporation (C)</td>
<td>4</td>
<td>1.02%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>393</td>
<td>100%</td>
</tr>
<tr>
<td>Source</td>
<td>Number</td>
<td>Percent</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>--------</td>
<td>---------</td>
</tr>
<tr>
<td>Unknown (5)</td>
<td>30</td>
<td>7.63%</td>
</tr>
<tr>
<td>Salt Lake County (3)</td>
<td>274</td>
<td>69.72%</td>
</tr>
<tr>
<td>Summit County (4)</td>
<td>9</td>
<td>2.29%</td>
</tr>
<tr>
<td>Wasatch County (6)</td>
<td>1</td>
<td>0.25%</td>
</tr>
<tr>
<td>Other Utah Counties (1)</td>
<td>21</td>
<td>5.34%</td>
</tr>
<tr>
<td>Outside Utah (2)</td>
<td>58</td>
<td>14.76%</td>
</tr>
</tbody>
</table>
CHAPTER 3.0
COMMENTS AND RESPONSES

3.1 UNIFIED COMMENTS

A. PURPOSE AND NEED

USE OF PUBLIC LANDS

PUR-DC-10-1 I would like to stress that I do not think our public lands will benefit the widest possible audience by further development for this type of recreation. I base this on three things, 1) irreversible loss of nature ecosystems, 2) snow sports are not a sustainable recreation opportunity, 3) ski resorts do not offer equal opportunity to all members of the population.

Response: The recreating public is comprised of a diverse group that enjoys many types of recreational activities, including snow sports at developed mountain resorts. During the winter, the vast majority of recreational visits to BCC are made by skiers and snowboarders utilizing the recreational facilities provided by Brighton and Solitude.

For decades, the Forest Service has worked closely with the ski industry to provide recreational opportunities on National Forest System (NFS) lands that require extensive infrastructure and large capital expenditures. The resulting facilities are enjoyed by a wide array of public users, many of which would not or, due to physical condition or disability, could not participate in other winter recreation activities on NFS lands. Mountain resorts have been important components of the recreational opportunities provided by our National Forests and we believe they will continue to provide these recreational benefits into the foreseeable future.

With respect to the specific comments: 1) Development of downhill skiing and snowboarding facilities does not result in an irreversible loss of natural ecosystems. While it is true that this type of development does represent a long-term commitment of natural resources to an intensive recreational use and it is also true that some impacts may be irretrievable (e.g., loss of timber production on maintained ski slopes), none of the impacts are irreversible. All infrastructure could be removed from the site and in time (and perhaps with remedial assistance), the site environment would revert to pre-development conditions; 2) Snow sports have been sustained for decades on both public and private lands. With proper management, we have no reason to believe that they will not be sustainable into the foreseeable future; and, 3) No form of recreation offers equal opportunity to all members of the public. Ski resorts provide recreational opportunities to a broader segment of the general public than do most other forms of winter recreation that are available on NFS lands. Participants include the very young and the very old, those that are physically very fit and those that are much less so and those that have a wide array of physical disabilities. Few recreational opportunities found on National Forests are as available to such a diverse group of users.
NIGHT LIGHTING

The DEIS failed to prove the point that night skiing and lighting is necessary or warranted. The Solitude DEIS stated that since the 1997-1998 season, there has been less interest in night skiing not more. The number of night skiers has decreased from 7,633 in 1997-1998, to 6,997 in 1999-2000. The document falls short in giving a rationale for increasing this activity when the interest in night skiing is obviously falling.

Response: The numbers referred to by the commenter are for Nordic skiers rather than night skiing. The purpose for night skiing, both Nordic and alpine, would be to enhance the quality of the overall skiing experience. The night skiing experience at Brighton, where approximately 15% of their skiers are night skiers, provides some indication that there is demand for night skiing opportunities. The Record of Decision will determine if the lighting proposal is warranted or necessary and will provide the rationale for the decision. The purpose and need for and the effects of night lighting are discussed in the EIS in Sections 1.9.1, 4.4.2, 4.4.4, 4.4.5.2, 4.4.5.3, 4.4.5.2.4, 4.4.5.2.5, 4.4.5.2.6, and 4.4.5.2.7, Table 1-1.

SNOWMAKING

The Snowmaking expansion is not a necessity and should not even be allowed as it endangers the water quality and quantity of water supply for residents of Salt Lake City.

Response: The purpose and need for the snowmaking proposals is to improve the early ski season by providing adequate snow cover in those areas where it is lacking. Conservation Management Practices will protect the water quality. Should the water supply to the City be threatened by snowmaking, the City has the power to order Solitude to stop its snowmaking withdrawals. The purpose and need for the snowmaking proposals are discussed in the EIS in Sections 1.3.1, 1.9.1.7, Table 1-1. The effects to water quality and quantity from snowmaking proposals are discussed in the EIS in Sections 1.3.1, 3.2.1.2, 4.2.1.1, and 4.5.1.

SKI LIFTS

Analysis of charts competitive summary shows Solitude with beginner terrain as Brighton more than Park City, Canyons and Deer Valley and less than the other meaning they are right in the middle. Based on this chart above I see no purpose and need to install a new beginner lift into an area undeveloped and counter to 1985 forest plan.

Response: It is true that Solitude's beginner terrain is comparable in quantity to other resorts in the vicinity. However, because of the topography and trail configuration, Easy Street offers the only beginner terrain that is exclusively for beginners. All other beginner terrain accommodates more advanced skiers as they exit more advanced higher elevation terrain. For this reason, Easy Street is often highly congested, especially on weekends and holidays. New terrain will provide better skier safety. The purpose and need for and the relationship with Forest Planning of additional beginner lift and terrain are discussed in the EIS in Sections 1.3.1, 1.9.1.5, Table 1-1. Please also see Response to Comment PRO-DC-208-4.
I ski at Solitude, and notice there is no great crush of skiers nor long lift lines. For whom are they building more lifts?

**Response:** Generally, no long lift lines exist at Solitude. Solitude's skier visits and market share of Utah skier visits has been declining for the past decade. A ski area permittee's economic viability is a legitimate agency concern because of our desire to provide and maintain a variety of recreational uses. Solitude's ability to retain present users and attract new or past users is affected by their outdated lifts and service facilities. Ski lifts and trails improvements also address skier safety and skier circulation. The purpose and need for and the effects of lift enhancements are discussed in the EIS in Sections 1.3.1, 1.9.1.5, Table 1-1.

The lift expansion has nothing to do with skier need. I have never seen a line at the existing 4-person high-speed quad, except maybe during holiday peaks.

**Response:** See Response to Comment PUR-DC-90-1.

**PARKING**

Why does Solitude need to expand their parking facilities by ripping up trees on Forest Service land along the canyon road? The DEIS said that they "rarely experienced parking capacity constraints in the past" and suggested a parking structure as an alternative.

**Response:** Solitude has proposed a Bus, High Occupancy and Other Vehicle parking lot and a West End parking lot, both of which would be located adjacent to SR 190. The purpose of these lots is to encourage the use of private forms of mass transit, provide parking for Nordic and backcountry users and increase parking for Solitude users and is discussed in the EIS in Sections 1.3, 1.3.1, 1.6.1.1.5, 4.4.5.2.2, 4.4.5.2.3, 4.4.5.2.4, 4.4.5.2.5, 4.4.5.2.6, 4.4.5.2.7, Table 1-1. Parking structures are considered and discussed in the EIS along with the effects of various parking configurations.

Similarly the parking area is almost never full so why build more parking.

**Response:** The purpose and need for relocated or expanded parking are discussed in the EIS in Section 1.6.1.1.5, 4.4.5.2.2, 4.4.5.2.3, 4.4.5.2.4, 4.4.5.2.5, 4.4.5.2.6, 4.4.5.2.7, Table 1-1.

**SKIER DEMAND**

I question the need to "meet the demand for downhill skiing." Skiing is not a growing industry in the US. A more honest description of the objectives of this expansion should read, "to attempt to expand the demand for downhill skiing". I fail to see how this would be a good thing for the Cottonwood canyons.

**Response** The purpose and need to "meet the demand for downhill skiing," was established in the Forest Plan for all Ski Resorts on the WCNF in 1985. Chapter 1 of the EIS discusses the relationship between Solitude's objectives in meeting its and the Forest Service's purpose and need. See also Response to Comments REC-DC-6-1, REC-DC-6-14, REC-DC-6-55 and SO-EC-DC-396-1.
I understand that the forest is for everyone, including lift riders. But the truth is that the lift riders are already being fully served. There is no shortage of facilities at Solitude. There are no lift lines. There is vacancy in the lodging. So who is this expansion supposed to serve? Where is the demand? It is a demand that this corporation is trying to create, so as to create profit. Is this what our forests are for serving private interests for profit?


Third, even the tenuously ski-related developments are out of line with visitor demand. I do not recall any pressing need for more infrastructure or services support. While I occasionally encountered relatively short lines at the ski lifts, I encountered nothing severe enough justify a substantial expansion of lift capacity.

Response: See Response to Comments PUR-DC-185-1 and PUR-DC-90-1. See also Response to Comment REC-DC-35-1.

Like any sport, skiing cycles through the periods of interest and fashion that are independent of ski area development. If people really want larger, fancier ski areas, why is backcountry skiing growing in popularity faster than other areas of skiing?

Response: The rate of growth of backcountry skiing relative to developed-site alpine skiing is outside the scope of this analysis. This question is more appropriately addressed in Forest Plan Revision, which considers differences in allocations of skiing within a permitted area versus backcountry skiing. Effects to backcountry users are discussed in the EIS in Sections 4.4.5.2.2, 4.4.5.2.3, 4.4.5.2.4, 4.4.5.2.5, 4.4.5.2.6, and 4.4.5.2.7.

From my own observations at Solitude and I use their facilities often, much of the proposed expansion is not necessary to accommodate the present crowds.


I strongly object to any increase in the size of Solitude’s permit area. Skier visits nationally have been flat for quite some time, yet resorts insist on developing with a “build it and they will come” mentality. There is absolutely no reasonable justification for increasing the permit area at this time.

Response: The purpose and need for ski area expansion and the need meet demand are discussed in the EIS in Sections 1.3.1, Table 1-1. The EIS, in Sections 4.4.5.2.2, 4.4.5.2.3, 4.4.5.2.4, 4.4.5.2.5, 4.4.5.2.6, 4.4.5.2.7 analyzes the effects of several alternatives to the proposed action that minimize or eliminated expansion of the permit area. See Response to Comments PUR-DC-185-1 and PUR-DC-90-1.
CLIENT BASE

PUR-DC-218-1 The only reason I can think of why Solitude would want to expand is to rival Snowbird and become the year-round mountain playground of Big Cottonwood. A poor reason to compromise public National Forest land.

Response: The purpose and need for improvements and expansions are discussed in the EIS in Chapter 1. The effects of year-round recreation are discussed in the EIS in Section 4.4.5.

PUR-DC-33-4 Please make sure every new building and lift is justified on the basis of present need and not on the basis of stealing skiers from another resort that will then request expansion to steal them back. Approve a minimal amount of improvements for immediate implementation and set verifiable customer numbers as goals to be reached before additional lifts, buildings and parking are permitted.

Response: The Record of Decision will provide the rationale for permitting or not, each component (on NFS lands) of the MDP and discuss the need that will be met. See Response to Comment PUR-DC-218-1 and PUR-DC-185-1.

PUR-DC-223-1 None of these “improvements” are necessary for people to enjoy the surrounding in Big Cottonwood Canyon. The success of Brighton Resort and Alta Ski area attests to the fact that such “amenities” are not the critical factor at work. Good management of the existing facilities with basic modernization seems to provide a better profit margin and customer satisfaction. The addition of the many frills Solitude is proposing will drastically raise the overhead but not necessarily attract enough paying customers to provide high profits... and at considerable cost to the canyon environment. Solitude does not seem to have a clear vision of what it takes to operate.

Response: We carefully evaluated the effects of Solitude's many proposed actions, in light of the stated purpose and need and the environmental impact. The appropriateness of such proposals will be determined in the Record of Decision. See also Response to Comment PUR-DC-218-1 and PUR-DC-185-1.

GENERAL

PUR-DC-152-1 It is getting more difficult by the year to escape the sights and sounds of resort construction stripping our Wasatch Mountains. Can you image how the increasing intrusion of private interests affects a person with a disability, such as my son who cannot keep hiking farther and farther to find a piece of wilderness?

Response: We are very sensitive to visual and noise quality on the WCNF. The effects of noise and visual quality are discussed in the EIS. A very small percentage of the Forest is managed for activities that result in extensive visual modifications and noise impacts. Solitude's base area has a Visual Quality Objective and a Recreational Opportunity Spectrum designation of Modification and Rural, respectively. This means, among other things, that substantial modification of the natural environment is expected in this area and that sights and sounds of...
humans are readily evident. Those users within or adjacent to Solitude's base area should expect these types of impacts.

We are also aware that there has been considerable recent development activity on private lands throughout the canyon that is also affecting visual and noise quality. The Forest Service has no jurisdiction on private lands. All approved actions on NFS lands must be consistent with the Americans with Disabilities Act (ADA).

PUR-DC-152-2 No one can return a mountain or the wilderness to what it was once cut-up and stripped for ski runs and buildings.

Response: We believe that the impacts associated with permitting mountain resorts are largely reversible, given time and in some cases, appropriate remedial actions. Although unexpected, if in the future it is determined that Solitude Ski Resort no longer justifies continued permitting, all infrastructure would be removed and the area would revert to pre-resort conditions. While restoration of the area would likely take decades, one has to keep in mind that much of the timber resources of the canyon were removed by timber and mining interests in the late 1800s and early 1900s, and today those forests have substantially recovered.

PUR-DC-23-1 I want solitude of the natural kind; not a Disneyland up the canyon. We don’t need an alpine slide or a summer ice rink. Please, no expansion!

Response: See Response to Comment PUR-DC-223-1.

PUR-DC-183-1 We are skiers and hikers and spend much time in the area. To commercialize the beauty of the area is only in the interest of the developer to make money. Please consider the economics and impacts of what can happen if this expansion is not successful. Why is this necessary?

Response: See Response to Comments PUR-DC-218-1 and PUR-DC-152-1.

PUR-DC-208-1 If Solitude for example lowered its pass price to $5 less than Brighton provided snow-made terrain features encouraging new school skiers and upgraded a couple of lifts to quads they may find a surprising increase in skier numbers with no other development. Purpose & need based on skier numbers is faulty logic.


PUR-DC-31-1 The areas of Big Cottonwood Canyon are already congested with people for both summer and winter sports. The environment is already becoming more polluted with traffic noise, people and abuse of the landscape with just the construction of the current buildings at Solitude.

Response: We share your concerns. That is why anticipated impacts of the proposed actions and their alternatives are carefully documented in the Draft and Final EISs.
It is difficult for me to understand why the USFS would want to approve facilities and uses in Big Cottonwood Canyon that would further congest that once-magnificent public resource.

Response: After a careful review of the public comments and the effects of the proposed action or alternatives discussed in the EIS, we will issue the Record of Decision that will provide our rationale for decisions made on each proposal (NFS lands).

**ADDITIONAL COMMENTS**


It is clear that neither the alpine slide or the skating rink are directly necessary for the operation and support of a ski facility. Alpine slides also fall into the class of developments specifically restricted from authorization under this bill based on their similarity to waterslides.

Response: The purpose of the EIS is to document the impacts of the proposed actions to the physical, biological and human environment within the greater context of the WCNF Plan. Consistency with the National Forest Ski Area Act (and other enabling legislation) is an important aspect of the decision-making process and will be documented in the Record of Decision.

The public (represented by the Forest Service) and Solitude, which operates on public land administered by the Forest Service, have conflicting purposes and needs. Solitude’s basic goal (referred to as Solitude’s “economic needs” in the DEIS) is to return an acceptable profit on its investment. The goal of the Forest Service is to meet the demand for outdoor recreation in a natural setting, while at the same time minimizing negative environmental impacts.

This conflict should have been explicitly acknowledged in the Solitude MDP DEIS, as it is the basis for many of the problems addressed by the DEIS.

Response: We stated in Section 1.4 of the EIS that Solitude’s economic concerns were not necessarily those of the federal government. Nevertheless, for the Forest Service to accomplish their goals for ski area development (as outlined in Section 1.6.1 of the EIS), economic viability is an important concern for both Solitude and the Forest Service. In the decision-making process, we will weigh very carefully our obligations to the public versus the wants of private enterprise. See also Response to Comment PUR-DC-90-1.

Solitude has goals, not needs, and has incorporated ways of meeting these goals into its MDP, not out of necessity, but out of a desire to meet its private goals. An acknowledgment of this fact would clarify the DEIS, allowing identification of projects that represent valid uses of public land for the public good versus projects that seek to externalize costs of private development onto the public, especially when these costs are the irrevocable alteration of public land into parking lots, urban attractions, and buildings to be used for purposes that run counter to the Forest Service’s stated goals.
Response: See Response to Comment PUR-DC-1-1.

PUR-DC-6-3 Solitude will be fortunate to have a growth rate of even 1% in both destination and local skier days from now until 2007. Given a growth rate of 1%, Solitude’s 2000-2001 skier day total of 186,700 will rise to 200,200, not the 282,000 in 2007 as projected in the DEIS (p. 4-170 for Alternative 1). This more realistic growth rate does not justify the magnitude of the expansion called for under Solitude’s preferred alternative. Solitude currently has ample unused capacity to meet demand, without any improvements, for the next ten years and beyond.

Response: The EIS has been revised to incorporate new forecast visitation numbers based on 2000-2001 actual skier numbers. However, "demand" is not just defined by skier visitation. Demand is created by the public’s expectation for quality recreation opportunities in the form of modern lifts, comfortable and appropriate base facilities and trail improvements. Without the opportunity to provide quality recreation opportunities and meeting these skier demands or expectations, visitation will likely continue to decline, as Solitude's has since the 1994/95 season. The effects on the recreational experience and skier visitation are discussed in the recreation and Socioeconomic sections in Chapter 4 of the EIS. See also Response to Comment PUR-DC-90-1.

PUR-DC-6-4 The DEIS states that sedimentation risk from this lift is high. Additionally, the Redman lift and trails would impact 1.5 acres of wetlands near the confluence of Mill F Creek and Big Cottonwood Creek. This represents more than a third of all wetlands impacted by Solitude’s proposals. The Honeycomb return lift represents a high risk of sedimentation. Sedimentation from the Honeycomb drainage would then affect Big Cottonwood Creek. The DEIS fails to prove the purpose and need for building the Honeycomb lift given the high environmental risks associated with its construction.

Response: High risk of sedimentation does not automatically translate into high levels of impact. The purpose of identifying areas of high risk to sedimentation is to take extra mitigative measures to ensure that the risk is reduced to acceptable levels. In most cases, high risk can be reduced to low risk by utilizing appropriate Conservation Management Practices and mitigation measures. Site specific analysis of sedimentation potential for all proposed projects is discussed in the Soils and Water Resources sections in Chapter 4 of the EIS. The purpose and need for all proposed actions is discussed in Section 1.3 of the EIS.

It will be during the decision-making process that the risk of environmental impact is weighed against the purpose and need for a project.

PUR-DC-6-5 Another project with high sedimentation risk is the Sol-Bright trail, Section 9a and 9b. The justification of need for a connection between Solitude and Brighton resorts is very shallow given the high potential for water quality and aquatic habitat degradation resulting from this project.

Response: See Response to Comment PUR-DC-6-4.

PUR-DC-6-6 The DEIS includes a table of projects that are inside the 300-foot buffer zone the Forest Service recommends around stream like Big Cottonwood Creek (see p. 4-68).
The purpose and need of many of these projects has not been established in the DEIS, including the West End lot, the high-occupancy vehicle lot, the skating rink, the RV spaces, and the Redman lift and trail.

**Response:** The purpose and need for all these proposed actions, as defined by the proponent, have been clearly established in the EIS in Section 1.3. During the decision-making process, the resort will carefully weigh the stated purpose and need with Forest Service guidance and environmental impact to determine whether the proposed actions will be approved for implementation.

**PUR-DC-6-7** The DEIS fails to prove the point that night skiing and lighting are necessary or warranted... The document falls short in giving a rationale for night skiing and lighting when the interest in night skiing is obviously falling.

**Response:** Solitude's proposal to add night skiing results from requests from guests and visitors and their belief that there is a sufficiently large market to justify their investment. We have no information to suggest that the interest in night skiing is declining. See also Response to Comment REC-DC-63-1.

**PUR-DC-6-8** The Sol-Bright lift proposal does not fulfill any meaningful purpose or need. This lift will not improve access to skiable terrain, will not add to the comfortable carrying capacity of the resort, will not reduce shuttle traffic, and will have an offensive visual impact on those visiting the Twin Lakes region. The main purpose of the interconnect lift appears to be that of a marketing tool. In spite of much talk over the years about interconnect lifts, there has never been enough interest from the public to justify their construction. For several years, Brighton and Solitude offered a joint pass, “but that offer was discontinued two years ago due to lack of use,” DEIS, p. 2-17.

**Response:** Both Solitude and Brighton have an interest in the Sol-Bright lift. Originally proposed as part of Brighton's MDP Update, it was later incorporated into Solitude's MDP Update because most of its alignment was in Solitude's SUP area. The intent of the proposal is to provide a convenient and enjoyable interconnect between the two resorts. It is not intended to provide significant additional terrain nor add to either resort SAOT. It is expected to reduce shuttle traffic. As discussed in Section 4.4.1 of the EIS, there will be visual impacts for some visitors.

The apparent lack of interest in a joint pass for the two areas has resulted largely from the inconvenient interconnect between the two resorts and the difficulty in constructing and maintaining the existing trail due to its exposure and limited trail width. The Sol-Bright lift combined with reconstruction of the Sol-Bright trail is intended to remedy that situation. The purpose and need for the Sol-Bright lift is discussed in Section 1.3 and the potential effects of the lift are described in the Recreation section of the EIS.

**PUR-DC-6-9** The proposed expansion of this [Last Chance Mining Camp] building far exceeds the square footage necessary to provide superior skier services. The reason for this oversized building is to accommodate Solitude’s convention and conference business and hosting of parties and other social events, all of which are incompatible with the purpose and
need stated in the DEIS... and are in conflict with the Forest Service’s administrative rules and
guidelines governing its oversight of ski areas.

Response: Alternative 3 has been revised to consider no expansion of the Last Chance Mining
Camp with a transfer of needed skier service improvements to the Moonbeam Center. Details of
this revision can be found in Section 2.4.3 of the EIS.

PUR-DC-6-10 We request that the USFS institute a moratorium on the approval of ski
area expansions or new ski areas until the Forest Service completes a programmatic
Environmental Impact Statement (PEIS). The Forest Service’s historical failure to address the
interconnectedness of the regional and national skier markets through a PEIS has permitted
piecemeal approval of ski area proposals and/or expansions with concomitant environmental and
economic impacts, and has allowed numerous ski area expansion approvals without an adequate
assessment of their cumulative and synergistic environmental and economic impacts.

Response: National direction regarding PEIS’s for alpine ski areas on NFS lands was recently
addressed in a letter from Dennis Bschor, Forest Service Director of Recreation, Heritage, and
Wilderness Resources, to Colorado Wild, a Colorado Base environmental group in reply to their
request to conduct a national PEIS. The attached text of the letter describes Forest Service
policy and direction regarding the preparation of a PEIS.

Thank you for your letter to Chief Bosworth requesting the Forest Service to
conduct a national Programmatic Environmental Impact Statement (PEIS) for
alpine ski areas.

Your letter makes assertions that the Forest Service is legally bound to prepare a
PEIS. I must respectfully disagree. There is no legal basis to conduct a national
level PEIS, to determine capacity or land use allocations. In *Citizens’ Committee
to Save our Canyons, et.al. v United States Forest Service, et.al., and Alta Ski
Lifts Company*, the United States District Court of Utah, Central Division stated in
its finding for the Forest Service, several points that parallel your request for a
PEIS. First, there was no abuse of discretion in the Forest Service’s decision not
to prepare a PEIS for the subject case, that 40 Code of Federal Regulations
1508.25(a)(3) is discretionary, and that the Master Development Plans at the four
different ski areas in question are not necessarily “similar actions” with “common
timing or geography.” Second, the Court ruled that it is within the agency’s
discretion to determine the appropriate area for cumulative effects analysis, and
that the Forest Service exercised this discretion reasonably. Additionally, the
court noted that the level of analysis for cross canyon effects to other ski areas
was appropriate.

Capacity analysis is best suited to local, site-specific analysis; taking into account
such information as demand. When a ski area project is proposed, the need for
the project can and should address the context in which the proposal fits, which
should include an assessment of direct effects to other ski areas. Additionally, the
environmental effects analysis conducted, as a part of any proposal, should
address cumulative effects. This cumulative effects analysis may include consideration of other existing and reasonably foreseeable ski area activities. Finally, the cumulative impacts of ski area expansion cannot be appropriately addressed through a PEIS. The appropriate scale for cumulative effects analysis is dependent on the type of effects of concern associated with the proposed actions rather than the similarity of the actions and is best addressed when a specific proposal is made.

See also Response to Comment CUM-DC-59-1.

B. ALTERNATIVES

TRANSPORTATION

ALT-DC-82-1 We have some comments about Parking and the Pulse Lift in Alternative 6: 1. By elimination of additional parking on Forest Service land (West end lot note in Alternative 2), Solitude is forced to cover half of their 4.7 acre Carrie Mill site with automobiles. This may prove problematic for keeping the relaxed skier circulation at the Eagle Express congregation area, particularly if a West End lift were considered – We believe that 1) a small public parking lot is needed that connects the Eagle Express area by bridge (not by chair lift). B) a favorable skier and ADA accessible lot (100-150 vehicles) could also be designed between Last Run, Shady Lane and the Power line uphill of the moonbeam lot. Such smaller, user-friendly lots would be welcome, but are not proposed.

Response: The objective for developing Alternative 6 was to synthesize to the extent feasible the comments and concerns of the various publics into a single alternative, while not losing sight of the purpose and needs of the proposed actions as expressed in Alternative 2. A major concern of the public is to eliminate or at least minimize the development of additional parking on NFS lands. Alternative 6 attempts to meet the need of the proponent while still addressing the concerns of the public. We recognize that development of parking on private land in the Eagle Express base area will impact skier circulation in this area. Please also see Response to Comment TRAN-DC-82-1.

ALT-DC-118-1 Solitude should be required to pay for transportation alternatives. After all, they are expecting to increase their revenues by increasing the number of visitors. For example, Solitude, in conjunction with the other canyon resorts, could be required to pay the Utah Transit Authority for more bus coverage, including the building of additional park-and-ride lots in the Salt Lake Valley. They could be required to offer discounts to those who travel by mass, so that they provide an incentive for their use.

Response: Solitude, as well as all Cottonwood ski areas, currently support UTA and mass transit by offering season pass holders and employees free UTA passes and contributing to the purchase of new ski buses, and through past contributions toward the construction of park-n-ride lots at the base of both Cottonwood canyons. The effects of parking and mass transit use are discussed in the EIS in Sections 3.4.2, 4.4.2. Please also refer to TRAN-DC-206-1 for a similar response.
ALT-DC-16-1 The whole idea of light rail in BCC or LCC has never been explored. While it is not feasible for Solitude to pursue such a venture alone, it seems that the Cottonwood Canyons as well as the UTA would benefit from exploring the idea of expanding the light rail into the canyons. This would alleviate roads and localized pollution altogether. If a 40 year solution to the transportation problems of the Cottonwood Canyons is to be determined, then I ask that a study be done on the potential positive/negative impacts, energy savings, and pollution reduction that putting such a system in the canyons might have for both the short and long term.

Response: The idea of a light rail has been discussed. However, the terrain within the Canyons including grade and hill-slope area makes the concept nearly impossible to implement. It would also be prohibitively costly with not much greater benefit from the bus service. A Light Rail with the same headways and same amount of transit parking would not increase the amount of ridership on transit up the Canyon. As stated in Section 3.4.2.1 of the EIS under Mass Transit and Park-an-Ride Lots, and Section 4.4.2.9 of the EIS, increased transit ridership will depend on expanding the park-and-ride parking near the mouth of the Canyon. Our recommendation would be to increase bus frequency and available parking for transit near the mouth of the Canyon. From a Transportation mitigation view, the Light Rail is no more beneficial than the bus service of the same frequency. There may be advantages for other issues such as air quality, etc. Please also see Response to Comment TRAN-DC-16-2 for a discussion related to transportation.

ALT-DC-184-1 If they want more parking, have them build a tiered parking garage. I get so infuriated by the land that is wasted by parking lots. It might be cheaper to ruin acres and acres of land, but it is smarter to build tiered garages-it takes less land and offers more parking spaces.

Response: Thank you for your comment. Please also see Response to Comment TRAN-DC-184-1.

ALT-DC-16-3 The one unclear part that I found in Alternative 4 was the statement that “as an alternative to the Pulse Gondola, Solitude would develop an internal ground transportation system to move people around.” No further description was given. However, since I strongly support alternative 4, I believe the DEIS would not be complete without elaborating on this further. I propose that electric vehicles be looked into in developing this transportation system.

Response: While it is correct that the DEIS did not identify the specific mode of ground transportation, the expectation was that of an internal bus system. The specifics of the type of vehicles, electric or diesel, etc. were not specified. A mitigation measure that promotes use of alternative fuels to minimize air pollution has been added to the EIS in Section 2.6.1, 2.6.9 and Appendix C. See also Response to Comment TRAN-DC-16-3.

ALT-DC-206-1 Public transit - need it! The parking facility at the base of the canyon is woefully inadequate and needs to be expanded. Expansion could be paid for by a toll assessed to private vehicles entering the canyon (which would also encourage use of public transit).

Response: Section 4.4.2.9 of the EIS indicates that additional parking at the Canyon Mouth area is necessary to expand transit capture. A new park-and-ride at Wasatch Blvd / 6200 South is
currently under construction to increase transit parking in the area. See also Response to Comment TRAN-DC-206-2.

ALT-DC-208-1 Solitude should be required to take an active part in providing convenient access to mass transit by increasing parking at or near the mouth of Big Cottonwood. What happened to the 500 car park and ride lot in Health rider & 200 So. 1215 area. This is critical for relieving congestion. Little Cottonwood canyon parking availability can be used as an example with several new options made available including parking area in flashing sign location open for year round use, allowance for public parking at LDS church down 94th So and to some extent the new giant lot of 94th & Highland although this one is last choice because of lack of convenience. A big mistake made with the completion of lite rail was elimination of shuttle bus service on Wasatch Blvd. which eliminated parking in the “Swamp Lot” which could be used for both canyons.


ALT-DC-208-2 It is interesting that the shuttle between Brighton & Solitude is eliminated because not only is it a running shuttle but Solitude Nordic also provides hourly shuttle bus service. How can an existing shuttle be eliminated from study? A simpler solution already in place at Alta is the rope tow. This concept could be improved on and is temporary viable alternative to all the other contrivances and should have been included as an alternative, hasn’t been eliminated from study and is unmentioned.

Response: Elimination or inclusion of services was set in the scoping process. As stated in Section 3.4.2 of the EIS, UTA already provides service to and between Brighton and Solitude, and in conjunction with the additional shuttle service currently provided by Solitude between its two base areas and the Nordic Center, the redundant service was viewed as unnecessary. The Sol-Bright trail provides a more convenient connection between the two ski areas of Solitude and Brighton. An enhanced ski connection would reduce the need for additional vehicles on an already congested highway. A rope tow lift, similar to the one used at Alta, would not be feasible in the Sol-Bright area due to the elevation gain of the lift. The tow at Alta moves skiers over flat ground. Rope tows are not appropriate for long, sustained grades or curved trails and would have similar impacts to chairlifts for construction and visual quality. See also Response to Comment TRAN-DC-208-4.

ALT-DC-226-1 I now have read that Solitude wants to put a lift through that old growth area, to connect Brighton and Solitude Resorts. Don’t allow the expansionists from Ski industry USA to further desecrate what remains of this beautiful trail and it’s old growth pines and pristine aspen groves. Is a shuttle service between the two ski areas out of the question?

Response: The UTA currently provides service between the two ski areas as part of their current operations. For that reason, an additional shuttle between the two ski areas was eliminated from alternatives considered. This is described in more detail in Section 2.3.6 of the EIS. Please refer to TRAN-DC-208-4 for a similar response.

ALT-DC-45-1 If they need new restaurants and skating rinks they should be build in the entry one area away from Giles Flat. An alternative to a pulse gondola would be a shuttle bus. It
should be noted that in our present agreement with Solitude there still exists the possibility of reopening the segment of the road that was closed. It would allow shuttle busses to travel from the lower area to the upper area without using SR 190.

**Response:** Alternative 4 analyzes ground transportation in lieu of the Pulse Gondola. Vehicles would utilize the maintenance road instead of SR 190.

ALT-DC-64-1 Transportation between the Eagle area and the Village is needed, but can this be done without adding another lift, i.e. Pulse Gondola? A shuttle bus could use the plowed maintenance road that already exists between the two areas.

**Response:** See Response to Comment ALT-DC-45-1.

**MOVE LAST CHANGE MINING CAMP AMENITIES TO MOONBEAM**

ALT-DC-42-1 If additional services are needed south of the Giles Flat area, I suggest a new building be built where the old A-frame, bathrooms, ski shop, ski patrol and ski school used to be: between the Village and the Sunrise Lift. That would be far enough to the south to not be in as close proximity to any homes as the Last Chance is now. That would make more sense anyway, because the pond they originally built for the purpose of winter ice skating is in that area already. It would provide bathrooms and facilities in a convenient place for the winter activities and for the Alpine slide in the summer. The facilities would be just as accessible there as at the Last Chance area, and would not infringe on the view, accessibility, or serenity of the Giles Flat homeowners. I think this would let Solitude accomplish their goals without interfering so much with the rights and peacefulness of its neighbors.

**Response:** Constructing new facilities between the Village and the Sunrise lift would interfere with the skier and pedestrian flow between the Village and mountain and would not be convenient for lower level skiers accessing the area from the Link lift. Instead, we have modified Alternative 3 in the EIS to shift many of the additional services proposed for the LCMC to the expanded Moonbeam and proposed Eagle lodges to reduce potential impacts to Giles Flat residents. Please also see Response to Comment REC-DC-42-1.

ALT-DC-48-2 My suggestion: Make the Moonbeam Center and the Village the social and commercial focal points of the resort. Last Chance Mining Camp is out of the way of the Moonbeam center and the Village.

**Response:** Alternatives 3 and 4 concentrate skier services in the Moonbeam and Eagle lodges. The effects of expansion of the LCMC and the relationship to skier flow and circulation are discussed in the EIS in Sections 4.4.5.2.4, 4.4.5.2.5. See also Response to Comment ALT-DC-42-1.

ALT-DC-49-1 It also seems apparent that much of the proposed additions to Last Chance Mining Camp would be better placed on property around the Moonbeam Center where people first arrive at the resort, where parking exists, where space for their location exists, and where no Giles Flat residents would be impacted by their development. Child care, ski school, transportation drop off and pick up, food services, meeting of family, ice skating etc. could be all
accommodated there and would be more convenient to the general public, rather than having to be transported to the Last Chance Mining Camp.

**Response:** See Response to Comments ALT-DC-42-1 and ALT-DC-48-1.

**NIGHT LIGHTING**

**ALT-DC-151-1** We also propose that you consider the following suggestions... that the proposed projects and features be implemented in a quality fashion with added attention to detail and design continuity. That the Nordic Trail Night Lighting (D5) proposed around Silver Lake at Brighton utilize temporary light fixtures and poles to be completely removed during non-winter times of year. The Silver Lake area is in a picture perfect 'open' alpine setting and any such fixtures/poles would detract from its visual quality. Suggest that all utilities be buried or places under boardwalk, and that all other 'non-temporary' light fixtures (such as those in wooded areas, Solitude Village, etc.) use black wire and attachments (not silver conduit) adjacent tree trunks, poles etc. placed at inconspicuous locations. In addition, suggest that all light fixtures be black if possible and be 'down' lighting to minimize visual impacts and spot light glare.

**Response:** Section 2.4.2.3 in the EIS discusses night lighting and proposed mitigation measures. Additional visual quality mitigation measures are discussed in Section 2.6.12. Additional mitigation measures for direction on colors and installation practices for fixtures and cables have been added to the EIS in Section 2.6.12. Please also see Response to Comment VIS-DC-151-1.

**GENERAL**

**ALT-DC-33-1** In Park City when a developer plans new housing the "mitigation" extracted is new trails. Maybe the FS should insist that in return for permission to build Solitude must either build new trails or help the FS with maintenance of trails already in use.

**Response:** Solitude is proposing to build a new trail on public and private land in Honeycomb Canyon.

**ALT-DC-50-1** The mountain biking trails need to be separated from hiking trails to prevent getting run over. The bikers could use the maintenance roads which might help to prevent a lot of damage to the vegetation on the hiking trails.

**Response:** The trail system on NFS lands does not typically differentiate use for trails unless mandated by regulation or in response to certain issues. Trails within designated Wilderness areas prohibit bicycles and other areas restrict bicycles on certain days to minimize user conflicts. At Solitude, as discussed in the EIS in Sections 2.6.6, 3.4.5.2, all existing trail and mountain roads are open to hikers and bikers. Many of the existing bike trails are already on maintenance roads. Solitude provides lift-served hiking and mountain biking on Friday through Sundays. Trails accessed by the lift are likely to see increased bike use and hikers should expect to encounter more bikes in these areas. A mitigation measure has been added to the EIS in Section 2.6.6 to require additional signing to inform hikers and bikers of potential conflict and to
promote trail use etiquette. The effects of mountain bike use on vegetation are discussed in the EIS in Section 4.3.2.

ALT-DC-63-1 I think the people mover is completely unnecessary and will be very visually obtrusive. If people have a hard time getting from one lot to another, perhaps resort maps could suggest how skiers can use current lifts and ski runs to get from one side to the other.

Response: The effects of the Pulse Gondola and resort circulation are discussed in the EIS in Sections 2.4.3. The EIS discusses ground transportation and lift-based alternatives to the pulse gondola. Alternative 3 considers the use of a new "West End" lift to facilitate transporting skiers from one part of the resort to another instead of the Pulse Gondola. A new lift would be required because the existing Eagle Express Quad is not suitable for beginner or novice skiers.

C. AIR QUALITY

AIR-DC-164-1 Allowing special parking area for diesel buses to park and idle all day would be particularly bad for the air quality as well as the water.

Response: The impact from diesel bus emissions in the special parking area are considered to be minimal near these parking areas, compared to emissions from vehicles located in the main parking areas. Bus exhaust emissions are released well above the ground level, compared to automobile emissions that exit near the ground. Although there will be an impact from the bus emissions, they are considered to be less than the emissions from the same number of vehicles that would be required to transport skiers if the buses were not available. Mass transit is encouraged to help minimize the air quality impacts that result from the transport of skiers to and from the Solitude Resort. Mitigation of bus emission impacts can be accomplished by locating the buses away from building air intakes and other critical receptor locations.

AIR-DC-82-1 While we find a spatial distribution of CO concentration over the Parking entry for the 11th highest ski day, (Appendix E), we would have preferred to find a graph of the current peak day visits from the highest to the 50th highest visitation per season.

Response: The air quality analysis focuses on the 11th highest ski day for all alternatives, as discussed in Section 4.2.3.2.3 of the EIS. Traffic data was not available to evaluate the 1st through 50th highest days. Since there were no traffic data available for these other days, an analysis of the effect of emissions from these other days was not possible.

AIR-DC-6-1 The section on air quality in the DEIS (p.3-12) does not discuss the effect a new bike path in Honeycomb Canyon would have on air quality. At a recent mountain bike race the Salt Lake Tribute on June 30, 2001 reported that: "...racers complained of breathing and visibility trouble, as Deer Valley's thick, choking dust floated out of fast developing ruts...". The DEIS should analyze this problem.

Response: Fugitive dust emission impacts from the disturbance of dirt by mountain bikers was not evaluated in the DEIS. There can be short-term impact from dust emissions from mountain biking over very dry and eroded trails. Although short-term impacts are expected, the short-term particulate standard, averaged over 24-hours, is not expected to be violated, since the emissions.
do not occur for extended periods of time. Mitigation of these impacts can be made by reducing bike speeds by bike patrols and by treating the bike trails with dust suppressants in areas subject to dust generation.

D. BOUNDARIES/LAND OWNERSHIP

BND-DC-56-1 Silver Lake Estates adjoins some of their proposed routes which it also includes. This is private property and Solitude has enjoyed year to year access over the private roadway leading from Silver Lake. They have repeatedly extended their tracks over, onto and across several pieces of private land-holdings.

Response: The Forest Service has no jurisdiction on private lands. Solitude must obtain permission from private landowners to operate their track across private lands.

BND-DC-63-1 As for the Redman lift, it constitutes an increase in the resort’s permit boundary. Ski resorts are supposed to be improving skiing opportunities within their current boundaries, not expanding.

Response: You are correct. The Redman lift constitutes an increase in the resort’s permit boundary and is not consistent with Forest Plan direction. The EIS, in Section 1.6.1.1 (1), discusses the Redman lift boundary expansion and the Forest Plan amendment that would be required if the lift is authorized.

BND-DC-1-1 Additionally, some of the property associated with this lift [Sol-Bright Lift] may be on Salt Lake City property. We have reviewed an easement given to use by representatives of Solitude. The easement, recorded in book 5342 page 1491 of Salt Lake County records, from Chesla Patterson to Solitude provides only the right to control avalanches and does not allow ski lift construction.

Response: Forest Service jurisdiction pertaining to the Sol-Bright lift and trail relates only to NFS lands. We note repeatedly in the EIS that proposed actions on private lands must be approved by the appropriate permitting authorities. Should we decide to approve the Sol-Bright lift and trail, our decision would only apply to public lands. Solitude would be expected to obtain approvals from other regulatory agencies prior to construction of the lift and trail on private lands.

E. CUMULATIVE EFFECTS

CUM-DC-156-1 The WCNF must look at cumulative impacts, not just the impacts from one project. The impacts of a single project are misleading when the whole picture is not looked at.

Response: We agree with your comment. We have carefully evaluated and disclosed cumulative impacts in the EIS (Section 4.1.1).

CUM-DC-16-1 In reviewing the Appendices one constantly finds the statement that the proposed amendment to the Forest’s long-term plan is “non-significant” because the area where
the amendment will be valid is only in a small portion of the National Forest. However, we must keep in mind that the area discussed is being built/urbanized substantially. One only needs to look on the resort's private land, specifically the upper parking area/now base village, to realize this. Any amendments made for further development at or near Solitude Mountain resort will be significant to the area of Wasatch-Cache National Forest because it is such a highly impacted area. The cumulative impacts, as we are always discussing in light of proposed projects, it seems, will be significant to this specific area.

Response: Statements in the EIS relative to the significance of potential Forest Plan amendments are made based on the significance of the proposed changes to the WCNF as a whole. The potential Forest Plan amendments that have been identified are viewed as being 'non-significant" because those amendments do not meet the criteria for significant amendments. The determination of significance for a Forest Plan amendment are based on direction from the National Forest Management Act, and differ from the determination of significances of environmental impacts, as defined by the Council of Environmental Quality, which is discussed in the EIS in Section 1.6.1. Each proposed amendment and its determination of significance are discussed in the EIS in Appendix A. The cumulative effects of MDP components on private and public lands, as well as other reasonably foreseeable actions on public or private lands, are discussed for each resource area in Chapter 4 of the EIS. Please also see SO-EC-DC-16-1.

CUM-DC-177-1 I am concerned about the cumulative expansion of all the ski resorts in both Little Cottonwood and Big Cottonwood Canyons. Over the years, each resort has slowly and continually encroached on public lands. Their combined expansion of increased size structures, more buildings, more lifts, bigger lifts not to mention all the machinery and roads dotting the landscape, are more and more invasive.

Response: It is true that ski areas in both Big and Little Cottonwood Canyons have upgraded and expanded their facilities in the last decade. We have not permitted any expansion of resort boundaries on NFS lands in the Wasatch-Cache National Forest, beyond those allowed in the 1985 Forest Plan, at any of the resorts. The cumulative effects of other local ski area expansion and developments on public and private land are discussed for each resource area, if applicable, in Chapter 4 of the EIS.

CUM-DC-20-1 I am alarmed that, if the Solitude proposal is approved, in concert with other similar ski resort proposals along the Front, it will mean the end of the Wasatch Mountains as a viable ecological entity, and as a safety valve for the thousands of residents of the Salt Lake Valley who need an unclogged backyard to cleanse their minds and bodies.

Response: The proposed actions at Solitude and other Wasatch resorts located on NFS lands are largely contained within their existing permit boundaries. We do not believe that this type of carefully contained development provides any threat to the ecological integrity of the canyons as a whole nor will this type of focused development have any significant impact on the capacity of the rest of the canyon areas to continue to provide important recreational functions. Section 4.4.5.4 of the EIS acknowledges recent ski area expansions on private land and the potential effects to dispersed recreation from these developments.
All development should be considered in terms of this long term impact rather than short 5 – 10 year impacts with the catch phrase ecosystem management actually used to address forest wide impacts rather than one small piece at a time.

Response: Ecosystem management is very important to us. All of our decisions consider very carefully potential long-term (>10-years) impacts, not only in the immediate area of the proposed action but also to the surrounding environment.

Developers from the past have already encroached upon the natural alpine setting of Big Cottonwood canyon. At what point will it stop? Is it when all the land, capable of supporting a building or some sort of structure, gone? When not one more vehicle can squeeze its way into the canyon, then do we then stop?

Response: As stated previously, only a very small percentage of NFS land in Big Cottonwood Canyon is designated for downhill skiing and snowboarding. The rest is designated for other types of recreational activities, all of which prohibits the construction of the types of facilities found within our ski area permit boundaries. The Forest Service has no control over development of private lands within the canyon where considerable development has occurred and is ongoing.

We also believe that insufficient studies have been conducted with specific emphasis on the ancillary impact of most proposals on the contiguous property owners. i.e., The fall out of USFS/Solitudes actions – the knock on effect.

Response: We have attempted to carefully consider the impacts of Solitude's proposed actions on adjacent property owners. In fact, Alternative 3 was developed specifically in response to concerns raised by Solitude's neighbors. Alternative 3 modifies many of Solitude's proposed actions to minimize new impacts to near-resort residents.

The overall impact attributed to long term effects on the visual appearance of the mountain and noise generated by mountain operations is underestimated.

Response: We are committed to carefully and thoroughly evaluate and disclose visual and noise impacts, both short-term and long-term. Selected sections in Chapter 4 in the EIS have been modified to address specific noise and visual quality issues raised in review of the DEIS. Please also see Response to Comment NOI-DC-57-1.

Within ‘The Canyons’, you have four down-hill ski areas that because of their close proximity to each other should be evaluated together for their environmental impacts in one NEPA document and not be arbitrarily isolated from each other by their corporation identity. When several proposals (four ski area MDPs) that will have cumulative or synergistic impacts upon a region are pending concurrently (or are scheduled) before an agency, their environmental consequences must be considered together [Kleppr v Sierra Club, 427 U.S. 390(1976); Save The Yak, 840 F. 2d at 720-21]. In addition, when other proposals (ski area MDPs) are more then mere speculation and are in the planning phase for the same geographical area, an EIS is required to consider the environmental impacts of all the foreseeable development in the geographical area [Alpine Lakes Protection Soc. V U.S. Forest Service, 838 F. Supp.
NEPA requires and case law confirms that the Forest Service must evaluate all four ski area proposals in one EIS. Also, cumulative impact analysis must include all past, present and reasonably foreseeable actions of both public and private factions (40 C.F.R. Section 1508.7).

Response: Because of the differing timing and geography of the ski resort development proposals, it was not practical to analyze all four MDPs together. The chronology of the EISs shows the dissimilar timelines. Alta Draft EIS was released to the public in October 1996 and the Final EIS in April 1997. Scoping for the Snowbird MDP EIS, a month after the Alta Final EIS was issued. Snowbird’s Draft EIS was not issued until October 1998 with the Final EIS released in November 1999. The Brighton Draft EIS was not released until December 1998, with the Final EIS released in October 1999. Solitude’s revised MDP Scoping Notice and comment period began in February 2000, later than decisions were issued for the other three ski area MDPs. The four ski areas simply were not at the same stage of readiness for an in-depth environmental review.

Cumulative effects from neighboring resorts have been predicted and considered in each separate analysis. While there are overlapping considerations and issues, the differences in timing and geography are sufficient to justify the preparation of separate EISs rather than a programmatic statement for all proposals affecting two canyons. The Final EISs and RODs for Alta, Snowbird and Brighton are specifically included by reference in Chapter 1 of the Solitude EIS.

Such programmatic analysis is appropriate at the Forest Plan level. The 1985 WCNF Forest Plan programmatically addressed the four resorts, as well as others on the Forest. The Forest Plan revision process that is currently underway will also examine developed winter recreation on a Forest-wide basis. In the case of this EIS, development at other resorts is addressed in terms of cumulative impacts. The cumulative impacts of such development are noted under each appropriate discipline in Chapter 4 of the EIS, with the most detailed treatment in the Recreation analysis. Please also see Response to Comment PRO-DC-59-1 and PUR-DC-6-10.

F. LAND USE AND PLANS

USE OF PUBLIC LAND

LU-DC-19-1 It is not the Forest Service’s job or responsibility to allow conversion of public land to increase profits on private land.

Response: Downhill skiing and snowboarding are important components of the recreational opportunities offered on NFS lands. Most ski resorts on the National Forest utilize a mixture of public and private land. This mix of private and public lands occurred by intent rather than by default by locating ski resorts in areas that were best suited to be developing for downhill skiing while minimizing the use of public lands. While it is true that private lands may benefit from the development of public lands, the primary focus of Forest Service decisions is whether a proposed action on public lands is needed and justified.
LU-DC-219-1 I read that Redmond would be part of the land "confiscated" for this development. Not a good idea. The National Forests are for EVERYONE, not just those with lots of disposable income.

Response: Section 1.6.1.1 (1) in the EIS discusses the permit expansion and Forest Plan amendment that would be required to authorize the Redman lift and trail. The effects of the lift and trail/permit expansion are discussed in the EIS in Section. Your comments will be considered in our decision.

LU-DC-223-1 Specifically, the Resort ought not to be able to expand any more onto public lands nor to enlarge its parking area to allow more vehicle space (or RVs!). The choice was made to exploit the private land of the upper parking area for cash flow by selling out to Intrawest. The rules should not be changed to accommodate the latest metamorphosis of the Resort's grand development plan. Rather than placing such a necessity as the fire station (long overdue) on public land, a suitable site adjacent to the highway should be provided, even if on valuable private land, to expedite the services it will provide to the community. Why should such an important public service be located ¼ mile from the highway, where unpredictable levels of snowfall, parking lot traffic, pedestrians, a narrow causeway and a 32,000-gallon propane tank intervene in the access of public safety equipment to the road?

Response: Your comments are appreciated and will be considered when we make our decision. Solitude's purpose and need for expanded parking, as well as Forest Plan direction on parking are discussed in Sections 1.3, 1.6.1.1 part 5, and 2.4.1 of the EIS. See also Response to Comment TRAN-DC-29-1. The proposed RV hook-ups are on private land and would require approval from Salt Lake County. Effects of RV parking are discussed in Sections 4.4.2.3.4, RV Hookups, and 4.4.5.2.3, Recreation, in the EIS. The effects of locating a fire station within the resort are discussed in the EIS in Section 4.4.3.3.2 under Public safety. Also see Section 2.3.9 of the EIS for a discussion of why we eliminated construction of the fire station on private lands from further consideration in the analysis. Please also see Response to Comment UTIL-DC-223-1.

GENERAL

LU-DC-169-1 This development remains within the site of already developed ground. It is an esthetically pleasing proposal. It helps limit development in more pristine areas, but concentrating development on ground already occupied. It helps reduce daily traffic up and down the canyons by providing places to stay on-site. And it provides a service that another location cannot, i.e.: it is at the resort development where the people want to be.

Response: Thank you for your comments. They will be considered when we make our decision. Please also see Response to Comment TRAN-DC-169-1.

LU-DC-175-1 We feel that it is important that areas on Forest Lands be allowed to make those improvements that the owners feel will best meet the needs of their resort and customers. Lifts, snowmaking, day lodges and trail systems should be able to be improved, replaced or modified to best meet the needs of the resort. New facilities should be approved when the need for them is clearly demonstrated.
Response: Thank you for your comments. The purpose and need for each the proposed actions are discussed in Chapter 1 of the EIS.

LU-DC-193-1 The canyon should be closed to further development so people can experience nature rather than the never ending requests of developers to destroy forests.

Response: Thank you for your comments. They will be considered when we make our decision.

LU-DC-222-1 I am in favor of a management plan for the central Wasatch that allows relatively extensive commercial development of the canyons on the Park City side of the range, and little or no additional commercial development of the Wasatch Front and its canyons. I believe this is a balanced perspective that promotes multiple use of the resource as a whole in a way that is consistent with the historical and natural characteristics of each area. The selection of the 2002 Winter Olympic venues is a good example of this basic concept in practice. As it applies to Solitude’s expansion request, this management philosophy would indicate that Solitude should be allowed to renovate and improve its existing facilities, but not expand lift-serviced terrain or parking areas beyond their current extent.

Response: Thank you for your comments. Solitude has proposed a relatively small area of expanded, lift-serviced terrain and expanded parking on NFS lands. The effects of the proposed expansion are discussed in the EIS. We will carefully consider all evidence before us, including your comments, when we make a decision on Solitude's proposed actions. Please also see Response to Comment PRO-DC-222-1.

LU-DC-96-1 Now, this resort wants to expand again, clear-cutting hundreds more acres of prime woodlands to increase this commercial sprawl in all directions, including up the canyon toward Brighton.

Response: Solitude's proposed actions would impact 38 acres of vegetation, less than 22 of which would be forest. The effects of the proposed improvement and expansion on vegetation are discussed in the EIS in Sections 3.3.2, 4.3.2. Please also see Response to Comment VEG-DC-96-1.

LU-DC-4-1 We note in the DEIS, several proposals to located new ancillary facilities, including parking, housing, an alpine slide and a skating rink. EPA offers a caution against placing ancillary facilities on public lands, where those facilities could result in the loss of natural or forest character in the area. As you are aware, when national forest lands lose their natural character, they are vulnerable to future land exchanges (see the Purpose and Need statements for the Grand Targhee/Squirrel Meadows Land Exchange project). The USFS policies on land exchanges make it difficult to deny any reasonable land exchange proposal involving a parcel that has lost natural character, making these lands vulnerable to future loss from the public domain.

Response: Solitude's permit area has been developed for alpine skiing for decades. This development has included base lodges, a maintenance facility, numerous lifts and parking facilities, much of which is located on public land. It could reasonably be argued that the permit...
area, especially in the base area, has already lost its natural character and therefore considered for a land exchange proposal, regardless of Solitude's current proposals. Nevertheless, all Forest Service decisions regarding use of NFS lands, including land exchanges, must pass a Forest Plan Compliance Review and Public Benefits Determination test. If a proposal is consistent with the Forest Plan, the public benefits of implementing the project exceed the public costs and it passes NEPA review, the project would likely be approved.

Within special use permit areas designated for alpine skiing, it is Forest Service policy to allow expansion and upgrading of those facilities, if the needs and demands of the skiing public are documented and justified and the proposed uses are consistent with the Forest Plan. It is clear that many of Solitude's proposed actions meet these criteria. It is less clear that some of the other proposed actions, like the alpine slide and expanded parking in undisturbed areas, will pass these tests. We will very carefully consider Forest Plan direction and NEPA documentation in making a decision on these ancillary proposed actions.

LU-DC-4-2 The Solitude DEIS cites some policy on the issued on ancillary facilities on public lands (p. 1-19). The Record of Decision for Arapaho Basin Ski Area’s MDP (November 1999) includes slightly more detail regarding useful references to relevant policy, regulation and guidance for ancillary facilities. At A-Basin, based on the review of these policies, the USFS denied a proposed alpine slide on public lands stating, “authorizing the alpine slide would not be consistent with relevant law, regulation, and/or policy.”

Response: We are aware of this decision. See also Response to Comment LU-DC-4-1.

LU-DC-5-1 Redman Lift: This proposal extends beyond the current Forest Service permit boundary and should be discouraged. Approval would require an amendment to the [Wasatch Canyons Master] plan.

Response: As explained in Response to Comment BND-DC-63-1, Solitude believes that their proposal is consistent with the intent of the 1985 Forest Plan (i.e., to allow Solitude to expand its permit boundary to accommodate an additional 600 SAOT). As disclosed in the EIS, approval would also require an amendment to the Forest Plan. We do not take those actions that require Forest Plan amendments lightly and will careful consider all NEPA documentation and public comment when making a decision on this proposed action. Please also see Response to Comment PRO-DC-5-2.

LU-DC-5-2 West End Access Lift: This proposal extends beyond the current Forest Service permit boundary and should be discouraged. Approval would require an amendment to the [Wasatch Canyons Master] plan.

Response: Thank you for your comment. Also see Response to Comment LU-DC-5-1. Please also see Response to Comment PRO-DC-5-3.

LU-DC-5-3 E-2 Redman Trail: The proposal extends beyond the current Forest Service boundary and should be discouraged. Approval would require an amendment to the [Wasatch Canyons Master] plan.
**Response:** Thank you for your comment. Also see Response to Comment LU-DC-5-1. Please also see Response to Comment PRO-DC-5-4.

**LU-DC-5-4** Although the WCMP is supportive of mass transit solutions the plan specifically does not allow expansion of parking on private property. It also assumes that the Forest Service Boundaries will remain the same. This would be an ‘additional parking lot’ and would require expansion beyond the existing Forest Service permit boundaries.

**Response:** Thank you for your comment. Also see Response to Comment LU-DC-5-1. See also Response to Comment TRAN-DC-5-3.

**LU-DC-5-5** West End Parking Lot: This would also be an ‘additional parking lot’ and would require expansion beyond the existing Forest Service permit boundaries.

**Response:** Thank you for your comment. Also see Response to Comment LU-DC-5-1. See also Response to Comment TRAN-DC-5-4.

**LU-DC-6-1** The DEIS makes the implicit assumption that ski area facilities will be shifted from private to public lands. There is no discussion as to whether or not this is a legal or ethical course of action. For example, resort operations will be moved and consolidated to a building to be constructed on public land. The former resort operations building will be torn down and the land used for real estate development. Nowhere do the DEIS authors discuss the public policy issues arising from the shifting of currently provided services from private to public land.

**Response:** The use of public lands by ski resorts varies widely from resort to resort. At some areas only ski trails and lifts utilize NFS lands. At Solitude, trails, lifts, lodges, various ancillary buildings and the majority of the parking are located on public lands. Still at other resorts, all facilities are located on public lands, including overnight lodging facilities. The Forest Service has the statutory authority through various pieces of enabling legislation to permit a variety of uses of the NFS lands, including overnight lodging and parking facilities, when other reasonable alternatives do not exist.

We are sensitive to the needs of special permit holders and to the need to avoid additional development of public lands to the extent feasible. Accordingly, we have developed alternatives to Solitude’s proposed actions that minimize or eliminate use of additional public lands for parking or skier service facilities. We will weigh very carefully the needs of Solitude versus the effects of relocating parking and skier services and facilities from private to public lands.

**LU-DC-6-2** The DEIS makes the assumption that it is acceptable public policy to accommodate a real estate developer’s goal of shifting existing ski area parking capacity currently (and for at least the last thirty years) located on private land to public land. Nowhere in the DEIS is this critical issue posed or analyzed... The DEIS also fails to analyze the legal framework and assumptions underlying the supposition that it is proper public policy to allow a real estate developer to move parking lots from private land to public land.
**Response:** Please see Response to Comment LU-DC-6-1. See also Response to Comment TRAN-DC-6-1.

**LU-DC-6-3** Solitude has private land elsewhere that can be used to replace the parking acreage displaced by the Village at Solitude. . . The DEIS fails to analyze the availability of this (Giles Flat) private land for parking. FSM 2340.3-Policy (3) states, "Deny applications of the private sector to construct recreational facilities and services on NFS lands if these facilities and services are reasonably available or could be provided elsewhere in the general vicinity."

**Response:** Solitude has proposed to fully utilize its private lands in the Eagle Express base area to accommodate expanded parking and a new Eagle Express base lodge. We have considered in detail alternatives that analyze relocating parking to public lands as well as to private lands, including the use of parking structures. The Giles Flat area does not meet any reasonable criteria for parking due to its location within a residential community, lack of reasonable ingress /egress, and its close proximity to the Big Cottonwood Creek and associated wetland/riparian community. The private land within the Giles Flat community is primarily developed with residences and the lots that are currently vacant are not contiguous and thus would not be conducive to resort parking. Please also see Response to Comment PRO-DC-6-3.

**LU-DC-6-4** The Forest Service must analyze how night lighting on public land will impact the greatest number of people. The recreational value of night lighting must be balanced with the negative effects it has on those within the immediate area and beyond who use and visit Big Cottonwood Canyon for reasons and activities other than skiing or snowboarding. Since Solitude presents no evidence that its use of public lands will benefit the majority of visitors, it is incumbent upon the Forest Service to adhere strictly to its rules and guidelines as to what constitutes an appropriate use of public land.

**Response:** We are charged with providing of wide range of diverse and quality recreational opportunities on NFS lands. It has never been intended nor is it required by Forest Service policy or legislation that each use meet the needs of the majority of the public. Only a relatively small percentage of the recreating public uses our remote wilderness areas. Even users of WCNF ski areas do not constitute a majority of visitations to this Forest. Night lighting, particularly of cross-country ski trails, would provide a recreational opportunity that does not presently exist in Big Cottonwood Canyon. The Forest Service will consider this and the environmental and social impact of night lighting very carefully when making their decision. Please also see Response to Comment VIS-DC-6-1.

**LU-DC-6-5** Allowing the construction of the proposed alpine slide would be inconsistent with all the Forest Service management and policy directives outlines in the DEIS. It is simply an amusement ride that should be located in an urban setting, not the upper reaches of Big Cottonwood Canyon. It represents a totally inappropriate use of public land and fails to conform to any aspect of the Forest Service goal of satisfying recreational demand in a national forest setting.

**Response:** Thank you for your comment. We recognize our responsibilities for managing NFS lands for appropriate uses and recognize that on other Forests, alpine slides have not been
permitted due to issues of appropriateness. The Forest Service policies and direction on recreational uses are described in the EIS in Chapter 1.

LU-DC-6-6 As with the alpine slide, a skating rink located on Forest Service land is totally inappropriate. Solitude is proposing this skating rink as an attraction for prospective condominium buyers and is hopeful that the Forest Service will allow the use of public land for an attraction that should be situated on private land.

Response: As with the alpine slide proposal, we have included several alternatives that would not permit the proposed skating rink to be located on NFS lands.

LU-DC-6-7 Solitude is proposing to combine its separate Nordic and alpine ski area special use permits into one 40-year Ski Area Term Special Use Permit. . . The most immediate area of concern involves the four-season resort concept that ski areas are so anxious to implement so that the authorized amenities arising therefrom promote and complement their real estate development ventures. Given all the reasons stated in this document (watershed, wildlife and ecosystem values, urbanization, noise, traffic, increasing congestion, etc.), the four-season resort goal is totally inappropriate for Big Cottonwood Canyon, which already receives the most year-round use of any canyon in the Wasatch-Cache National Forest.

Response: Solitude has offered four-season amenities for many years. Both the Nordic and alpine trails are presently available for hiking during the summer months and no change is anticipated from combining the Nordic and alpine ski area special use permits. Please also see Response to Comment REC-DC-6-13.

G. NEPA PROCESS/FOREST PLAN

NEPA PROCESS

PRO-DC-59-1 Within ‘The Canyons’, you have four down-hill ski areas that because of their close proximity to each other should be evaluated together for their environmental impacts in one NEPA document and not be arbitrarily isolated from each other by their corporation identity. When several proposals (four ski area MDPs) that will have cumulative or synergistic impacts upon a region are pending concurrently (or are scheduled) before an agency, their environmental consequences must be considered together [Kleppir v Sierra Club, 427 U.S. 390(1976); Save The Yak, 840 F. 2d at 720-21]. In addition, when other proposals (ski area MDPs) are more then mere speculation and are in the planning phase for the same geographical area, an EIS is required to consider the environmental impacts of all the foreseeable development in the geographical area [Alpine Lakes Protection Soc. v U.S. Forest Service, 838 F. Supp. (W.D. Wash. 1993)]. NEPA requires and case law confirms that the Forest Service must evaluate all four ski area proposals in one EIS. Also, cumulative impact analysis must include all past, present and reasonably foreseeable actions of both public and private factions (40 C.F.R. Section 1508.7).

Response: See Response to Comments CUM-DC-59-1, CUM-DC-177-1, PUR-DC-6-10 and CUM-DC-20-1.
PRO-DC-59-2    Restrictive tailoring of the alternatives has been viewed as attempts to circumvent one of the most basic tenants of the NEPA, requiring agencies to sincerely consider several alternatives to the proposed action. The Forest Service has failed to incorporate federal interest in its statement of the purpose and has effectively foreclosed sincere examination of any alternatives that would not accomplish exactly what Solitude proposes to do. The goals of a proposal should be considered in terms of the federal interest in the federally protected resources involved [Van Abbema v. Fornel, 807 F. 2d 633, 638 (7th Cir. 1986)].

**Response:** FSH 1909.15, Chapter 20, Section 22, requires the Forest Service to "rigorously explore and objectively evaluate all reasonable alternatives". We evaluated Solitude's proposed actions, listened carefully to the comments received during scoping and crafted a number of alternatives that addressed the various interests and opinions expressed, including the No Action Alternative. With the exception of Alternative 2, Solitude's proposed action, none of the alternatives accomplishes all that Solitude wants to do and most eliminate several of what Solitude considers important projects. Consequently, we believe that the range of alternatives evaluated in the EIS fully complies with NEPA regulations. The Forest Service purpose and need relating to ski area management is defined in Section 1.3 in the EIS.

**FOREST PLAN**

**PRO-DC-20-1**    The clear implication of the above fact is that Solitude is becoming not a ski resort, but an all-purpose luxury and recreation resort. This is not an appropriate use of Forest Service land. Forest service guidelines, including management direction in the proposed WCNF Plan, clearly state that all private-land alternatives and substitutes must be explored and exhausted before special-use permits on Forest Service land are considered.

**Response:** The majority of Solitude's development is within the Solitude Village and is located entirely on private lands, over which the Forest Service has no control. All of Solitude's developments and proposed actions on private lands are analyzed for cumulative effects in Chapter 4 of the EIS. We will carefully evaluate actions proposed for NFS lands to ensure that they comply with management direction found in the 1985 WCNF Forest Plan. Solitude currently operates under a special use permit and the EIS explores and analyzes a wide range of alternatives, on private and public land. The Record of Decision will determine the appropriateness of each proposal and ensure its consistency with the Forest Plan, which, for some proposals, may require a Forest Plan amendment.

**PRO-DC-208-3**    Installing Honeycomb return would provide lap skiing opportunities in Silver Fork and would also increase guided skiing for lower level skiers. Inclusion of Sol bright allows this to occur from Brighton also and increases lift serviced access to the Twin Lakes Terrain which was supposedly protected for cross country use in 85 forest plan. In fact this may increase use to the point that it is lost as a viable cross country area requiring another forest plan amendment unmentioned in DEIS.

**Response:** The Honeycomb lift would likely increase use in Honeycomb Canyon, but would not provide access or efficient egress to or from Silver Fork Canyon. The base terminal of the Honeycomb lift would be located over 100 vertical feet and close to one-quarter mile up-canyon from where backcountry skiers would exit Silver Fork Canyon. Skiers would be then required to
ride four lifts to reach the backcountry access point. The Summit lift currently provides access to the backcountry.

The purpose of the Sol-Bright lift is to enhance the existing skier movement between Solitude and Brighton Ski Areas. Because of highly limited terrain in the Twin Lakes area, we do not anticipate much lap skiing associated with the Sol-Bright lift nor would we anticipate significant interference with existing cross-country terrain. The effects of the Honeycomb and Sol-Bright lifts on backcountry skiing opportunities are discussed in the EIS in Section 4.4.5.2. Please also see Response to Comment REC-DC-208-7.

PRO-DC-208-4 Analysis of charts competitive summary shows Solitude with beginner terrain as Brighton more then Park City, Canyons and Deer Valley and less than the other meaning they are right in the middle. Based on this chart above I see no purpose and need to install a new beginner lift into an area undeveloped and counter to 1985 forest plan.

Response: It is true that Solitude's beginner terrain is comparable in quantity to other resorts in the vicinity. Because of the topography and trail configuration, Easy Street offers the only beginner terrain that is exclusively for beginners. All other beginner terrain accommodates more advanced skiers as they exit more advanced higher elevation terrain. Easy Street is often congested, especially on weekends and holidays. The purpose and need for the Redman lift is discussed in the EIS in Sections 1.3.1, Table 1-1. See also Response to Comment REC-DC-27-2. Please also see Response to Comment PUR-DC-208-2.

PRO-DC-50-1 The Forest Plan would have to be amended, & that the Salt Lake County Master Plan clearly states that there should be no further expansion outside the current boundary. The Sol-Bright lift & trail & the high occupancy parking area east of Moonbeam lot are both against the Forest Plan, & S.L.C. Wasatch Master Plan. Wasn't the point when these plans were made was to stop any further expansion of any ski resort outside their current boundary?

Response: The EIS clearly states that Forest Plan amendments would be required to permit the Sol-Bright lift and the high occupancy parking area. The intent of the Forest Plan will be carefully considered when we make our decisions relative to these two (and all) proposed actions.

PRO-DC-68-1 Would the Forest Plan need to be amended to allow more parking? Or will the forest land be traded with private land to “solve” the problem?

Response: As is disclosed in the EIS, Forest Plan amendments would be required for the development of the Bus, High Occupancy and Other Vehicle lot and the West End lot, as well as any increase in parking on NFS lands unless associated with mass transit. As noted in the previous response, we will carefully consider the intent of the Forest Plan when making decisions relative to proposed new parking on NFS lands.

PRO-DC-16-1 While I don’t believe alternative 4 is perfect I do believe it is the best alternative detailed. The other alternatives all require damaging amendments to the Forest Management Plan and open the door for increased development at other resorts in the Wasatch-Cache National Forest.
Response: Thank you for your comment. We will consider your opinion when we make our decision.

PRO-DC-222-1 I am in favor of a management plan for the central Wasatch that allows relatively extensive commercial development of the canyons on the Park City side of the range, and little or no additional commercial development of the Wasatch Front and its canyons. I believe this is a balanced perspective that promotes multiple use of the resource as a whole in a way that is consistent with the historical and natural characteristics of each area. The selection of the 2002 Winter Olympic venues is a good example of this basic concept in practice. As it applies to Solitude’s expansion request, this management philosophy would indicate that Solitude should be allowed to renovate and improve its existing facilities, but not expand lift-serviced terrain or parking areas beyond their current extent.

Response: Thank you for your comments. See also Response to Comment LU-DC-222-1.

GENERAL

PRO-DC-26-1 I join our community in being proud of the four ski resorts within the TriCanyon National Forest. I urge the Forest Service to encourage these resorts to begin a campaign to become precious small gems in a West full of resorts whose ever-increasing size is making them as appealing as cheap chunks of glass. The Forest Service can certainly authorize modifications within the boundaries of our resorts that will enhance the quality of the existing resort, but must deny requests for modifications that will increase the carrying capacity of that resort and hence of the TriCanyons.

Response: The effects of the proposed action and alternatives to it on the quality of the experience and the carrying capacity are discussed in the EIS. The decision whether to expand the permit boundary and/or increase the carrying capacity will be made after careful consideration of the effects and public comments and will be documented in the Record of Decision.

PRO-DC-103-1 It has been my understanding that the FS major canyons responsibility was to husband and protect the watershed values of the local canyons for the Salt Lake Valley residents.

Response: While protecting watershed values is a major consideration for the Forest Service, we are also mandated by federal law to provide for multiple uses of NFS lands, where appropriate. Within Big and Little Cottonwood Canyons, we attempt to provide a wide range of recreational opportunities for the public at a level that sustains the integrity of the ecological systems, including, but not limited to watershed protection. The effects of the proposed action and alternatives to it on watershed resources are discussed in the EIS in Chapter 4.

PRO-DC-208-1 Along with refusing to look at forest wide long-term impacts, private land development impacts on adjacent public forest lands are not addressed because “there’s nothing we can do”. Comments from responsible government agencies, Salt Lake City Watershed public utilities, Salt Lake County, Corps of Engineers etc. do have opinions on these developments and rather than including these in the DEIS, providing opinions on private land development impacts,
these will be maybe included with the final decision with Forest Service, the only group with all the information. This refusal to provide all available information invalidates the DEIS.

**Response:** We consider all comments in our environmental analyses and decision-making, including those made by the governmental agencies mentioned above. Furthermore, we have included impacts of proposed actions on private lands within the common framework of the EIS expressly to assist other regulatory authorities in their decision-making. All relevant information that is available to us is provided in the EIS.

**PRO-DC-29-1** The Last Chance Mining Camp building should be expanded in a manner that does not allow for dedicated or undedicated conference/convention space. Forest Management direction does not allow for business convention activities in the National Forest.

**Response:** Thank you for your comment. Alternative 3 has been modified to consider the effects of moving all expanded services to the Moonbeam Center while eliminating any expansion of the Last Chance Mining Camp.

**PRO-DC-43-1** The watershed... I can understand why I can't take my dog or horses in the canyon and I agree with strict enforcement. The existing 250 units and the proposed expansion is 180 degrees from the rest of the policy.

**Response:** The existing and proposed development of the Solitude village is on private land and is therefore outside of Forest Service jurisdiction.

**PRO-DC-50-1** Since we live in a desert state why don't we protect & preserve all areas of water, rather than say we will use mitigation measures to try & minimize the loss of the aquatic life & riparian zones?

**Response:** The effects to aquatic life and riparian zones are discussed in the EIS in Chapter 4. See also Response to Comment PRO-DC103-1.

**ADDITIONAL COMMENTS**

**PRO-DC-1-1** The proposed plan introduces activities such as Alpine slides, and in line skating. With a growing population along the Wasatch Front, such carnival-type activities that can be conducted adequately in the urban environment should be kept out of the alpine watersheds. . . The development should be limited to those activities that are truly dependent on an Alpine setting. The proposed plan seems inconsistent with FSM 2303 that prohibits providing facilities for urban-type sports on NFS lands. FSM 2343.11 encourages summertime use of ski area facilities where that use is compatible or enhances natural resource based recreation opportunities and does not require additional specialized facilities. The introduction of these theme park activities is clearly incompatible with this policy.

**Response:** Thank you for your comment. We recognize the direction provided in the Forest Plan and Forest Service Handbook and Manuals, relative to these types of recreational activities. We will carefully consider all comments from the public and Forest Service policy direction.
when making our decision. The effects to watershed resources are discussed in Chapter 4 of the EIS.

**PRO-DC-1-2** The proposed plan seeks to use 3.39 acres of public land to replace parking that Solitude essentially removed from their privately owned property so those lands could be used for residential and commercial developments... The result is increased degradation of water quality both from increase development and impacts due to parking expansion... Under the 1985 Forest plan additional skier parking lots are not allowed on National Forest Lands. We are opposed to and believe that the two story parking structure violates the 1989 Salt Lake County Wasatch Canyons Master Plan. The plan states that additional parking lots are not allowed at the ski areas on private lands unless they contribute to solving transportation problems.

**Response:** Any parking lot expansions on NFS lands would require a Forest Plan amendment as described in Section 1.61.1 of the EIS. Parking lot expansion would only be allowed with appropriate mitigation measures to insure that impacts to water quality remain within acceptable levels. The effects of parking lot expansions on public and private lands are disclosed in the EIS in Section 4.2.1. Any parking lot expansions on private lands, including structured parking, would have to obtain authorization and permits from the appropriate authorities.

**PRO-DC-3-1** The Utah Division of Wildlife Resources and the Fish and Wildlife Service should be included during development and implementation of mitigation plans for aquatic resources, soil and water quality, vegetation, wetland and riparian areas, and wildlife.

**Response:** Your comment is noted. We routinely collaborate with the Utah Division of Wildlife Resources and the U.S. Fish and Wildlife Service on many projects where a consensus of opinion is desired. We would anticipate doing the same on some of the Solitude proposed actions, should they be approved.

**PRO-DC-5-1** It is recommended that any approval [of support facilities on public or private lands] be subject to the requirements of the Wasatch Canyons Master Plan [WCMP] and the Foothills and Canyons Overlay Zone Ordinance [FCOZ]. A building permit should be required.

**Response:** It is our policy to work with local governments and make every effort to meet the intent of zoning ordinances even though we are not legally required to do so for projects located on NFS lands. Solitude will be required to comply with all applicable ordinances on private lands.

**PRO-DC-5-2** Redman Lift: This proposal extends beyond the current Forest Service permit boundary and should be discouraged. Approval would require an amendment to the [Wasatch Canyons Master] plan.

**Response:** As explained in Response to Comment BND-DC-63-1. As disclosed in the EIS in Section 1.6.1.1, approval would require an amendment to the Forest Plan. We do not take lightly any action that would require a Forest Plan amendment and will careful consider all NEPA
documentation and public comment when making a decision on this proposed action. Please also see Response to Comment LU-DC-5-1.

**PRO-DC-5-3**  
West End Access Lift: This proposal extends beyond the current Forest Service permit boundary and should be discouraged. Approval would require an amendment to the [Wasatch Canyons Master] plan.

**Response:** Thank you for your comment. Also see Response to Comment LU-DC-5-2.

**PRO-DC-5-4**  
E-2 Redman Trail: The proposal extends beyond the current Forest Service boundary and should be discouraged. Approval would require an amendment to the [Wasatch Canyons Master] plan.

**Response:** Thank you for your comment. Also see Response to Comment LU-DC-5-3.

**PRO-DC-6-1**  
The DEIS tries to make the case on p. 1-9 that Solitude needs to make improvements to stay competitive with other Utah ski resorts. The Forest Management Plan does not designate this as a Forest Service responsibility or role.

**Response:** The EIS discloses in Section 1.4, that Solitude’s visitation numbers are down relative to other local ski areas that have made improvements to their lifts and infrastructure. Section 1.4 also discusses Solitude’s desire and need to remain economically viable and competitive within the framework of meeting the Forest Service’s need of providing a wide range of quality recreation opportunities. We have a legislative mandate to provide a variety of public recreation opportunities on NFS lands. Forest Plan direction allows private enterprise to provide for those recreation opportunities that require high capital investments, such as downhill skiing. Both private investors and the Forest Service anticipate and expect that a reasonable return on that investment may be achieved. While private-sector economic concerns are not necessarily those of the federal government, we are obligated within our private/public partnerships to allow reasonable and justifiable improvements to recreational services. The ROD will determine which improvements are reasonable and justifiable.

**PRO-DC-6-2**  
The conditions described in the DEIS present a situation that is exactly the opposite of that which is envisioned in the Forest Plan, where ski areas would be allowed to expand when ticket sales regularly exceed comfortable skier capacity and demand is greater than supply.

**Response:** The 1985 Forest Plan provides the direction to meet the demand for downhill skiing by allowing additional expansion within permitted facilities. The EIS analyzes a wide range of alternatives, including some that permit no expansion of the permit area. The Forest Plan also directs for the interdisciplinary review of all improvements. Areas considered for expansion are not consistent with the Forest Plan and would require amendment to the Plan. The EIS has met the Forest Plan direction for consideration of proposed improvements at Solitude. The EIS, in Section 1.6.1.1, discloses the Forest Plan inconsistency with capacity, as measured by SAOT.

**PRO-DC-6-3**  
Solitude has private land elsewhere that can be used to replace the parking acreage displaced by the Village at Solitude. . . The DEIS fails to analyze the availability of this

---

*Volume II – Response to Comments* 3-32
private land for parking. FSM 2340.3-Policy (3) states, "Deny applications of the private sector to construct recreational facilities and services on NFS lands if these facilities and services are reasonably available or could be provided elsewhere in the general vicinity."

Response: See Response to Comment LU-DC-6-3.

PRO-DC-6-4 Recreational Vehicle Parking Lot: Although the proposed RV lot (park) with hookups for overnight use would be located entirely on private land, it is important that the Forest Service be careful not to be partner in its construction.

It is instructive to note that this parcel of land is located within either the county FR or FM zones. Both these zones do not allow a recreational vehicle park as either a permitted or conditional use. Only through a zoning waiver process can Solitude gain county permission to construct such a lot. The reason the FR and FM zones do not allow this use is because recreational vehicle lots are incompatible with a forest setting, as defined by the county.

Response: This proposed action is located entirely on private land and therefore is not under Forest Service jurisdiction. This is noted in the EIS in several locations and also noted that the proposed action is not consistent with the intent of our Alternative 4, which is to minimize "urbanization" of Big Cottonwood Canyon. For Solitude to implement this action, permits would be required from other permitting authorities.

PRO-DC-6-5 The DEIS fails to give a reasoned analysis of the specific factors from which it draws the conclusion that the multiple amendments proposed are indeed non-significant. Because a Forest Plan amendment will alter accepted management goals, the proposed amendments must be examined as to their impact on the forest and forest administration. The analysis found in the DEIS is anything but adequate.

The Big Cottonwood Canyon (and, more expansively, including Little Cottonwood Canyon and Millcreek Canyon) area might represent limited acreage in relation to the total "planning area," but this assertion misses the obvious fact that these areas are the most intensively used of the entire Wasatch-Cache National Forest. All the proposed Forest Plan amendments fail the "non-significant" test for this very reason alone.

Response: Statements in the EIS relative to the significance of potential Forest Plan amendments are made based on the significance of the proposed changes to the WCNF as a whole. The potential Forest Plan amendments that have been identified are viewed as being "non-significant" because those amendments do not have forest-wide implications, are timed at the end of the existing Forest planning period, do not significantly change Forest goals, objectives, or outputs, and do not change management prescriptions. The proposed amendments to the Forest Plan are site-specific to Solitude only and will not create precedence because the Forest plan revision is under way and the revised Forest plan will create the direction for the next fifteen-year planning period. That does not mean that the actions themselves are non-significant. Most of these proposed actions are important to the local area and have been identified, evaluated and disclosed as such in the EIS.
In addition, the DEIS assertion of non-insignificance is flawed on at least three other counts: 1) Significance to human visitors: human visitation is concentrated in Big Cottonwood Canyon and a significant fraction of these visitors will see the areas impacted by Solitude’s proposed developments, and they will spend more time in those areas than in more remote areas of the Forest. (2) Significance to natural resources: The riparian area and surrounding meadows are crucial habitat for a very large fraction of the biodiversity in the Forest, and provide essential resources (both food and water) for many more species than do not reside there permanently. These riparian regions and meadows are a small fraction of the total Forest, but they are by no means insignificant. (3) A sizeable fraction of the riparian and meadow habitats surrounding the Big Cottonwood Creek have already been destroyed by development, and a much larger region has been fragmented and developed to the point that more sensitive species cannot use it. These cumulative impacts were all insignificant when taken one at a time, in isolation from each other. Together, they have fundamentally altered the most productive and species-rich areas of Big Cottonwood Canyon in just the last decade or two (as acknowledged in the DEIS).

Response: The criteria for determination of significance for potential Forest Plan amendments are based on NFMA planning requirements and criteria (FSH 1909.12, Section 5.32) and are disclosed in Section 1.6.1.2 and Appendix A of the EIS. Significance of human, biological and physical environmental impacts as defined by the Council on Environmental Quality, are discussed for the direct, indirect and cumulative impacts from Solitude's proposed actions and have been carefully documented in the EIS. Most proposed actions would have no unacceptable impacts to visual resources, sensitive species or canyon biodiversity. Some actions (e.g., the reconstruction of the Moonbeam access road) would have important positive effects on riparian zones and aquatic resources. Some proposed actions appear to be inconsistent with Forest Plan direction. We will carefully consider all available information when making its decision on Solitude's proposed Master Plan Update.

The proposed Forest Plan amendments will serve as precedents in future similar cases. If an amendment is deemed insignificant once, how can a later similar one be deemed significant? And once such a precedent is in place, each additional insignificant change will eventually erode the entire integrity of the 1985 Forest Plan and future forest plans. If the Plan is enforced only in areas where no developments are planned, but amended whenever development is proposed, it is no different from the complete absence of a plan, and thus serves no purpose.

Response: We will carefully consider NEPA documentation and public comment when deciding whether or not to amend the Forest Plan without regard to significance of the amendment. See also Response to Comments PRO-DC-6-6 and PRO-DC-6-5.

The intent of the second scoping document (2000) was to update the original one, including changes that were made in response to planning issues and public input. There are a number of projects under Alternative 3 that are now our “proposed action”: They area: C5, D1, C9, D7 and C13.
Response: Thank you for clarifying the "proposed" action. We have made changes in the EIS that provide further clarification to the proponent's preferred actions, some which are now found in Alternative 6.

H. NOISE

LAST CHANCE MINING CAMP

NOI-DC-45-1 Expanding the present Last Chance Mining facility would only increase the potential for more violations.

Response: The activity level in the Last Chance Mining Camp area is likely to increase under Alternatives 2, 5, and 6, resulting in potential additional noise in this area. The EIS has been modified to include analysis of potential noise effects from the expansion of the LCMC.

NOI-DC-49-1 I have strong objections to the expansion of the LCMC for the following reasons: The bright lights and noise from evening activities.

Response: Alternative 3 in the EIS has been modified to address noise, lighting and use of the LCMC and impacts to adjacent landowners. See also Response to Comment NOI-DC-45-1.

NOI-DC-54-1 This new proposal would increase the noise, activity and lights, further limit our view and the accessibility to our home from the ski slopes, as well as exacerbate the many other problems we have already had to put up with.

Response: Please see Response to Comments NOI-DC-45-1 and NOI-DC-49-1.

OUTDOOR SKATING RINK

NOI-DC-21-1 Noise. The Record of Decision must (i) restrict the decibel level of the music to a very low level such that the music will not disturb the Giles Flat residents, (ii) require that music be directed uphill (south), (iii) require that the music be turned off no later than 9:30 pm, and (iv) require that the operational hours of the rink end no later than 9:30 pm such that no activity occur after that time.

Response: The above mentioned mitigation measures for the skating rink have been added to Section 2.6.5 of the EIS under Alternative 2 to address potential impacts to adjacent landowners.

NOI-DC-22-1 Obviously, the substantial activity associated with these numerous and significant uses would create substantial noise and light, and result in greatly increased individual and vehicular traffic in the area, all to the detriment to the Giles Flat. In order to mitigate these negative impacts on Giles Flat, the Record of Decision must (i) restrict the decibel level of the noise from the Last Chance Mining Camp to a very low level such that the music will not disturb the Giles Flat residents, (ii) require that any music be turned off not later than 9:30 pm, (iii) require that the operational hours of the Last Chance Mining Camp and related facilities (e.g., the Pulse Gondola and the skating rink) end no later than 9:30 pm such that no activity occur after that time.
Response: See Response to Comment NOI-DC-21-1.

Consequently, I would oppose the approval of the ice skating facility unless built into the permit as a condition would either be no music or music at a low decibel level which would not disturb the Solitude/Giles Flat neighbors.

Response: See Response to Comment NOI-DC-21-1.

PULSE GONDOLA

Our support is, however, conditioned on no drive being installed in or about Last Chance Mining Camp. Stated differently, the drive must be installed at the Moonbeam Center or the Eagle Express Base area.

Response: Thank you for your comment. Alternative 3 has been revised to move services from the Last Chance Mining Camp to the Moonbeam Center. These revisions are described in Section 2.4 of the EIS and analyzed in Section 4.4.5. In addition, a mitigation measure for Alternative 2 has been added to Section 2.6.5 of the EIS to address placement of the pulse gondola drive. See also Response to Comment NOI-DC-45-2.

I definitely don’t need the constant banging of a pulse gondola adding to the already annoying noise of the Apex lift.

Response: Alternative 3 of the EIS has been modified to move amenities from the Last Chance Mining Camp to the Moonbeam Center. Installation of the Pulse Gondola is not included in this Alternative, therefore, any noise associated with the Pulse Gondola would not be generated. Please also see Response to Comment NOI-DC-49-1.

ALPINE SLIDE

The alpine slide proposed development raises the possibility of noise transmission from the upper parts of the alpine slide area into our camp area.

Response: It is acknowledged that additional recreational activities in the area would likely result in an increase in noise in the area. Section 4.2.4 of the EIS has been modified to reflect the potential for increased noise in Big Cottonwood Canyon as a result of development activities. The Forest Service does not have jurisdiction for development projects located outside of NFS land that also may contribute to increased noise in the area.

LONG TERM IMPACTS

The overall impact attributed to long term effects on the visual appearance of the mountain and noise generated by mountain operations is underestimated.

Response: As stated in Section 4.2.4 of the EIS, noise from operational activities would nominally increase in the immediate area of the ski resort as a result of the proposed projects. Such activities include the lift terminals, snowmaking guns, snowgroomers, and snowmobiles.
and typically occur at night. None of this operational machinery would raise the ambient noise levels beyond that currently experienced within the developed portion of the SUP boundary, and therefore would not result in long-term noise effects. Please also see Response to Comment CUM-DC-57-1.

NOI-DC-35-1 And even if the most conservative estimation of skier days by the year 2011 turn out to be true, how can the documentation claim that there will be no long-term noise effects in Big Cottonwood Canyon?

Response: Please see Response to Comment NOI-DC-57-1.

NOI-DC-6-2 This report’s mitigation measures and management section does not address noise. P. 2-80 sends the reader to Appendix C, but this section primarily discusses the management of airborne nuisances, with minimal discussion of noise. Possibly this is because it supports the unsubstantiated assertion that Solitude’s “daytime operations during the winter create minimal noise. . . [and] snowmaking and trail grooming activities are the greatest single source of noise during the winter.” (p.3-19). Since these noise sources typically occur only at night during non-operating hours, the DEIS asserts that noise is, therefore, not a problem. A more comprehensive study should be done to prove that this is indeed the case.

Response: The effects to noise levels associated with snowmaking and resort operations are discussed in Section 4.2.4 of the EIS. Noise levels resulting from snowmaking and trail grooming equipment is presented in the EIS in Section 3.2.4. Mitigation measures for noise for the Last Chance Mining Camp and Outdoor Skating Rink have been added to the EIS for Alternatives 2, 5 and 6. Please also see Response to Comments NOI-DC-45-1 and NOI-DC-57-1.

NOI-DC-6-4 The DEIS asserts that any increase in noise levels will be of short duration and “therefore is not considered significant” (p. 4-65). But the construction proposed in Alternative 2 and the noise associated with it both at the resort and on SR190 will last at least five years, most of which will occur during the summer. After that time, there will continue to be traffic noise from people using the resort, as well as continuous noise arising from the use of grooming, maintenance and service vehicles. The DEIS fails to tell the reader what these levels will be and to what they are being compared.

Response: The environmental impacts from noise generated by summer and winter activities are described in the EIS in Section 4.2.4. Noise associated with construction activities are considered temporary in that they cease when the development project is completed. As stated in the EIS, noise from people and activities is expected to increase in the area for all Alternatives. Section 4.2.4 of the EIS also provides current ambient noise levels for operational activities at Solitude. Noise sound pressure levels provided in the EIS are compared to permissible noise levels under OSHA as well as acceptable nuisance noise levels. Please also see Response to Comment NOI-DC-57-1.
TRAFFIC

NOI-DC-6-1 The DEIS omits any solid study on noise pollution caused by traffic, the impact of increased traffic on wildlife, and future projections of traffic in Big Cottonwood Canyon that will result from population growth.

Response: The effects of increased traffic on noise are discussed in the EIS in Section 4.2.4. Additional information on noise pollution caused by traffic has been added to Section 4.2.4. Please see Response to Comment TRAN-DC-6-3 for impacts on traffic due to population growth, and Response to Comment WL-DC-6-11 for a response on wildlife.

NOI-DC-6-3 The study summarized in the DEIS on present noise levels states that noise tends to be higher during the summer than during the winter. . . No measurements of noise levels are presented and levels are only discussed in terms of “greatest” or “more evenly distributed.” While claiming higher noise levels in the summer, this study only focuses on traffic during the summer season in order to compare it with winter traffic. This focus is incomplete, as the study should be using this base data in order to project the increase in traffic noise arising from the expansion of the resort to “full season” use.

Response: Section 3.2.4 of the EIS discusses noise sources and existing noise levels for the entire year. All sources of noise were evaluated, including construction and maintenance activities, equipment operation, vehicular traffic, avalanche control, snowmaking, and recreational uses. The evaluation was not only focused on traffic for the summer months, in fact, the EIS states that construction and maintenance activities contribute the greatest to summer noise levels. Section 4.2.4 of the EIS addresses the impacts to current noise levels anticipated from the proposed Alternatives. See also Response to Comment NOI-DC-6-1. See also Response to Comment TRAN-DC-6-4.

I. RECREATION

NIGHT LIGHTING

REC-DC-45-1 Another item I would like to speak in opposition to is the night lighting. Please do not light up the base facilities in front of my home. Night lighting will only encourage intrusive summer activities. This is a residential area.

Response: Nighttime activities, on a year-round basis, would probably increase as a result of the Proposed Action. Even if ski trail night lighting is not approved, Solitude may offer a variety of seasonal evening activities in conjunction with expansion of the Village base area. The resort seeks to offer a broad range of activities to guests, and such activities may be disruptive to the existing ambiance of adjacent residential areas. The effects of the proposed night lighting and night activities are discussed in the EIS in Section 4.4.3.3.2, Socioeconomics, and Section 4.4.5.3.2, Recreation. Also see Response to Comment VIS-DC-28-1.

REC-DC-47-2 The low profile night-lights being proposed for the Nordic trails and beginner Alpine terrain on Easy Street are again projects that would greatly increase the number and range of activities offered at such a wonderful resort.

Volume II – Response to Comments 3-38
Response: Thank you for your comment.

REC-DC-63-1 There is no analysis in the DEIS regarding the demand for downhill night skiing, and the limited number of people who actually go night skiing can go to Brighton. Solitude fails to show the purpose and need of either lighting scheme, especially given the negative impacts on wildlife, canyon neighbors, and canyon visitors who want to see the night sky.

Response: In proposing night lighting Solitude is responding to requests from guests and visitors to provide nighttime activities. Historically night lighting has been most successful at resorts that are close to urban centers. Solitude would fall within this category. Currently Brighton receives an average of approximately 52,000 nighttime skier visits annually. The purpose and need for Solitude’s Master Development Plan Update are discussed in Section 1.3 of the EIS. The potential effects of night lighting are discussed in the EIS in Section 4.4.5.3.2, Recreation, Section 4.3.3.1, Wildlife, and Section 4.4.1, Visual Resources. Also see Response to Comments REC-DC-28-1 and SO-EC-DC-63-1.

REC-DC-6-5 The DEIS fails to prove the point that night skiing and lighting are necessary or warranted. . . The document falls short in giving a rationale for night skiing and lighting when the interest in night skiing is obviously falling.

Response: Please see Response to Comments REC-DC-63-1 and PUR-DC-6-7.

REC-DC-6-4 Beyond the question of whether night lighting is even necessary or desirable for Big Cottonwood Canyon is the issue of the current energy crisis in the West. Ski resort activities use large amounts of energy. What will be the impact of approving increased energy intensive facilities in the canyon when compared to the expected energy availability and pricing? This issue should be addressed and analyzed in the DEIS by the Forest Service.

Response: Utah Power has stated that they have the available capacity to accommodate all foreseeable power demands in BCC, including all of Solitude’s potential needs (EIS Section 2.4.1.8). Assessment of the environmental impacts associated with increased energy use and its relationship with potential energy crises would be speculation and is outside the scope of this analysis. See also Response to Comment UTIL-DC-6-1.

REC-DC-27-3 There are very positive public functions that night lighting provides. As to Alpine skiing, Easy Street trail (Link lift) (1) would help in meeting demand for twilight and evening skiing, particularly kids, best demonstrated by the very successful Brighton night skiing operation, (2) goes a long way to retain skiers after the normal lift closings thereby disbursing departure times of down canyon traffic, and (3) is an important linkage between the upper base area Village and Moonbeam Center parking lot.

Response: As with all proposed elements outlined in the EIS the need and potential effects of this particular element are assessed in the EIS. Please see Section 1.3, Purpose and Need, and Section 2.5, Comparison of Consequences by Alternative.
As to Nordic, Solitude has the only cross-country skiing operation in the Salt Lake Ranger District. There is substantial demand for twilight and evening cross-country skiing which cannot now be served. It is primarily valley resident demand driven. It involves two portions of the Nordic track system (a) Silverlake loop and (b) a section of Redman Campground, i.e., providing evening accessibility at both the Brighton facility and the Solitude Village facility. The 1985 Wasatch-Cache Forest Plan provided to, “Allow lighting of the Silver Lake Flat loop for night cross-country skiers” (para.1b). Lighting the loop is compatible with adjacent existing Brighton night lighting.

Response: Other Nordic opportunities exist in the region, including Mountain Dell, and Park City, and Soldier Hollow. Please see Response to Comment REC-DC-27-3.

A very necessary night lighting project in the base area satisfies a number of required purposes including people moving between base areas and parking, in limited multiple-use recreation areas, and safety-access issues in the base area – (a) ice skating rink, (b) path from bridge to Last Chance Mining Camp, (c) area east and south around LCMC providing circulation and small play area, and (d) safe access to and around LCMC, the Pulse Gondola and Easy Street leading to Moonbeam Center and the parking lot.

Response: Please see Response to Comment REC-DC-27-3.

The limited night lighting we are doing, in reality, will have far less impact than is currently publicly perceived. We will design a sensible lighting system with appropriate light levels and direction in each respective area to minimize impacts.

Response: Please see Response to Comments REC-DC-27-3 and REC-DC-63-1 for a discussion on the effects of night lighting.

We have reached an understanding with our Giles Flat neighbors to light Easy Street from the north side, directing it uphill and hooded.

Response: While it is important to reach a consensus with individuals that may be directly affected by the night lighting, the proposal must also be evaluated for potential effects to other visitors and wildlife. Please see Response to Comment REC-DC-63-1 for reference to the sections of the EIS pertaining to the effects of night lighting.

The Forest Service should be cognizant of the energy crisis and not support plans that involve wasting energy for lighting ski runs. The impact on canyon residents and wildlife would be too high.

Response: Please see Response to Comment REC-DC-18-1.

We also would like to see the hours extended on the Nordic Trails and beginner slopes at Solitude. This would also allow people to use Solitude’s facilities after work and evenings during the week. Maybe, if the hours for Solitude’s guest services were extended at Last Chance, Moonbeam and Eagle Express, people would stay longer and spend more
money! This would also help alleviate some of the current heavy traffic volume we have experienced going down Big Cottonwood Canyon’s road.

Response: See Response to Comment REC-DC-28-1

ALPINE SLIDE

REC-DC-50-2 Regarding the alpine slide I don’t believe that it is necessary or wanted! There is one in Park City already. Have they even asked people in general if they would even use it?

Response: The purpose of the alpine slide is discussed in Section 1.3 of the EIS. It is proposed to broaden the range of recreational opportunities to Solitude visitors as well as other visitors in BCC. The alpine slide at Park City is a very popular activity for residents and visitors, particularly from Salt Lake. On weekends, visitors will wait for an hour or more to ride the slide (Park City Mountain Resort Sports Desk 2001). Approximately 1.5 million people visit BCC during the summer season. Solitude is anticipating that a portion of these visitors is willing to come to the resort to participate in the mix of recreation activities they propose to offer.

REC-DC-1-1 The proposed plan introduces activities such as Alpine slides, and in-line skating. With a growing population along the Wasatch Front, such carnival-type activities that can be conducted adequately in the urban environment should be kept out of the alpine watersheds. The development should be limited to those activities that are truly dependent on an Alpine setting. The proposed plan seems inconsistent with FSM 2303 that prohibits providing facilities for urban-type sports on NFS lands. FSM 2343.11 encourages summertime use of ski area facilities where that use is compatible or enhances natural resource based recreation opportunities and does not require additional specialized facilities. The introduction of these theme park activities is clearly incompatible with this policy.

Response: The effects of these proposals are discussed in the EIS in Section 1.6.2, Forest Service Manual. The Decision Maker will make a determination in the ROD as to whether or not the proposed summer time activities comply with guidelines set forth in FSM 2303 and FSM 2343.11. See also Response to Comment PRO-DC-1-1.

REC-DC-4-3 Forest Service Policy found in FSM 2343.11 states: “(e)ncourage summertime use of ski area facilities where that use is compatible with or enhances natural resource-based recreation opportunities and does not require additional specialized facilities.” An alpine slide is a “specialized facility” and hence, authorizing one at a ski area would be contrary to Forest Service Policy, regardless of the type of authorization employed.

Response: See Response to Comment REC-DC-1-1.

REC-DC-4-4 Forest Service Policy also calls for denial of applications by the private sector to construct or provide outdoor recreation facilities if the facilities are reasonably available elsewhere (FSM 2340.3). The fact that an alpine slide is available at Park City meets the policy criteria for denying an application.
Response: The context of what facilities are reasonably available as set forth in FSM 2340.3 typically considers sites in the immediately vicinity of the SUP. The question to be answered is if a facility located in Park City is reasonably available to guests staying in BCC or in Salt Lake City. That will have to be determined by the Decision Maker and outlined in the ROD. Also see Response to Comment REC-DC-1-1

LAST CHANCE MINING CAMP

REC-DC-142-1 We support Solitude’s improvements with the exception of the things they want to do at the Last Chance Mining Camp. It seems to us the public would be much better served by having those built in the Moonbeam area while there is more room and better access.

Response: We have revised the alternatives to shift functions previously proposed for the LCMC to the Moonbeam and Eagle base areas. These revisions are described in Section 2.4 of the EIS and analyzed in Section 4.4.5.

REC-DC-126-1 However, as parents of young children, we urge you to change the location of the day care and nursery and kids activity area that are proposed for the Last Chance Mining building to be placed in the Moonbeam area instead. We feel that it is very important to have those close to where we park and more accessible for pick up and drop off. Those facilities would lose a great deal of their value and appeal if we have to try to get to the Last Chance Mining Camp to be able to use them. We also do not see a need for expanded food facilities or multiple use rooms at the Last Chance Lodge, but they are very much needed at the Moonbeam and Eagle Express areas of the resort.

Response: Please see Response to Comment REC-DC-142-1.

REC-DC-117-1 What is important to us is to have the kids things close to the parking area so we can get to them easily. We especially don’t want to have to take a lift or bus to get to day care or a kid activity center. Why not put those at Moonbeam? It would make things a lot easier for everyone with children.

Response: Please see Response to Comment REC-DC-142-1.

PULSE GONDOLA

REC-DC-38-1 The business of a gondola to carry people along the front of the mountain for the elevation of only a couple hundred feet is wasteful, environmentally unsound, and a departure from the vigors of skiing. A short walk and lift ride already covers this traverse; and when I consider lift towers in tandem, such as Deer Valley’s, I’m dismayed.

Response: The EIS evaluates a number of alternative means of transporting visitors throughout the three base areas at the resort. Using standards employed by the ski industry for acceptable skier walking distances, the distance between the western end of the Moonbeam lot and the Moonbeam Center is considered too far to walk for many visitors
PRO-DC-6-5. With completion of the Village Center, more day skier parking would be located in Moonbeam and pushed even further from Moonbeam Center. The gondola would serve as an access lift for those Solitude guests not on skis or snowboards. See Section 1.3, Purpose and Need, Section 4.4.1, Visual Resources, and Section 4.4.5.2, Recreation, of the EIS for detailed discussions of potential effects from the Pulse Gondola.

REC-DC-25-1 We are in favor of having Solitude build the proposed pulse gondola. In the past it has been difficult to access the Last Chance Mining Camp (LCMC) area from the main parking lot and the quad chair. A beginner skier that finds themselves at the quad chair has no option than to ride up the quad lift and find their way down the intermediate slopes to arrive at the LCMC. It can be an unsafe and difficult way to arrive at the popular lunch area.

Response: See Response to Comment REC-DC-38-1.

REC-DC-51-1 Also, I must ask why a people mover is needed between the Moonbeam Center and the Last Chance Mining Camp, when the same thing can be accomplished by using the Link lift which ends up at the same place?

Response: See Response to Comment REC-DC-38-1.

REC-DC-27-9 There simply is little alternative to the Pulse Gondola in providing effective people-moving along the one mile of base area at Solitude. The distance between west to east ends needs to be satisfied in either the form of a monorail, train, etc., or the proposed Pulse Gondola. It impacts the environment far less than any other alternative that could be proposed including shuttle buses which are not the most user-friendly method for transporting people. Alternative 3 was developed to move the LCMC terminal to the south side of building mitigating concerns of Giles Flat property owners. The alignment provides minimal visual impacts from the highway. Its advantages have been well documented: (1) minimize need for intra-resort shuttle, (2) solve base area access and connect multiple-base areas, (3) utilize effectively lower lot day-skier parking with the Village, LCMC, Moonbeam Center and Eagle Express facilities, (4) minimize duplicate facilities in summer, and (5) take cars off the highway.

Response: Please see Response to Comment REC-DC-38-1.

REC-DC-82-1 The pulse gondola lift (see one at the Canyons) is apparently needed to make remote parking work. It seems difficult however, to imagine how the lift will cross several tower spans over the Moonbeam parking lot, then pass in front of the Moonbeam center, then cross over the link lift. True, the lift would run empty most of the time, but it does not seem to fit very well. A) The west end lift can offer redundancy to Eagle Express, and provide an easy glide to the Last Chance Miner’s camp, more aesthetically. This lift would however displace at least half of the parking spaces now proposed at the Carrie Mill Site. B) Dedication of a separate parking shuttle lane may offer more comprehensive transportation service than the pulsed gondola lift. See also Response to Comment REC-DC-82-2.

Response: The west end lift was included under Alternative 3 in the EIS as an alternative to the Pulse Gondola. Please also see TRAN-DC-82-2 for response to comments related to parking and transportation.
OUTDOOR SKATING RINK

REC-DC-16-1 If there were that big of a desire for ice-skating at Solitude the resort would have long ago used the lake right outside of the Nordic Center for day skating. Obviously it hasn’t and therefore there seems to be no need for this project.

Response: A dedicated space for an ice rink would allow Solitude to develop a site that could be easily managed to maintain a quality ice surface. Solitude has conducted extensive research regarding the utilization of the small fishing pond for ice-skating and has determined that there is too great a temperature fluctuation and the lake is too deep to provide a safe and manageable ice surface. The purpose and need for this project is discussed in Section 1.3 of the EIS.

REC-DC-50-1 I don’t think that we need another ice skating rink given how many there are down in the valley! I still want to know if it’s going to have some type of cover over it to keep the snow off, & if not, how do they propose to keep the snow off?

Response: Please see Response to Comment REC-DC-16-1. Snow would be removed using a snow blower and shovels, and the ice surface would be maintained with an ice grooming machine.

SOL-BRIGHT LIFT AND TRAIL

REC-DC-175-1 With the lift and associated trail work in place, the connection will be unique in its ease of use, it will create the opportunity to share resources between the areas, as well as the ability for users to move freely between the two resorts without the need to shuttle on the highway.

Response: The effects of the Sol-Bright lift are disclosed in Section 4.4.5.2.3 of the EIS.

REC-DC-35-3 The Sol-Bright trail would further erode the amount of skiing available to backcountry skiers. Between resort encroachment and helicopters, the area available to backcountry users trying to get away from the resorts and helicopters continues to dissipate.

Response: The Sol-Bright Trail already exists and is located within the Solitude SUP. Improvements to the trail would not likely increase backcountry travel outside of the SUP. However, the Sol-Bright Lift may facilitate additional backcountry traffic to the Twin Lakes Pass area by skiers and snowboarders from Brighton. Effects of the lift and trail are discussed in Sections 4.4.5.2.3 and 4.4.5.4 of the EIS.

REC-DC-1-2 We are opposed to the Sol-Bright lift and trail. . . The 1989 Salt Lake County Wasatch Canyons Master Plan clearly states that any inter-connect must be part of the larger mountain transportation system. The cumulative impacts of the ski inter-connect are not addressed in the DEIS.

Response: Please see Response to Comment VIS-DC-6-5. The connection between Solitude and Brighton has been in effect for many years. A lift in the area would enhance the existing connection between the two resorts rather than create a new interconnection.
proposed alignment of the lift and trails lies on private land, and Salt Lake County would need to determine the consistency of the projects with its Wasatch Canyons Master Plan as part of its decision making process. Effects of lift interconnects are discussed in Section 4.4.5.4 of the EIS. See also Response to Comment CUM-DC-1-1.

REC-DC-6-6 One justification for the lift appears to be the problem of not having an adequate trail for the upper portion of the interconnect. This is, in fact, a non-issue, as only Solitude skiers who wish to access Brighton use this trail. This is a downhill access problem and has nothing to do with return access to Solitude. Thus, even if the Sol-Bright lift were built there would still be a problem for those skiers wishing to access Brighton because the proposed improvements do not address the lack of reliable snow.

Response: Section 1.3 of the EIS, Purpose and Need, states that the Sol-Bright Lift is proposed to make an efficient link with Brighton. A lift would accomplish this link more efficiently than a trail alone. All of the alternatives propose trail work on the Sol-Bright Trail, to one degree of another, to remediate the problems with the current trail. Effects of the various alternatives from the proposed trail and lift improvements are discussed in Section 2.5 of the EIS.

HONEYCOMB CANYON RETURN LIFT AND TRAIL

REC-DC-208-7 Installing Honeycomb return would provide lap skiing opportunities in Silver Fork and would also increase guided skiing for lower level skiers. Inclusion of Solbright allows this to occur from Brighton also and increases lift serviced access to the Twin Lakes Terrain which was supposedly protected for cross country use in 85 forest plan. In fact this may increase use to the point that it is lost as a viable cross country area requiring another forest plan amendment unmentioned in DEIS.

Response: A number of skiers and snowboarders from Solitude already ski in the Silver Fork area, but it is unclear how the Honeycomb Return lift would increase this activity. The bottom terminal is proposed to be located at about 8,400 feet in elevation, which would put the lift out of reach of most skiers returning from Silver Fork Canyon, along the Silver Fork Road. Furthermore, even with the installation of the Honeycomb lift, the access to Silver Fork would still require a physical effort beyond the means or desires of most Solitude skiers. It is also unclear how the lift would increase guided skiing for lower level skiers beyond what is currently available as the terrain covered by the current guide service is generally more advanced. The most proximate lift access to Twin Lakes Pass already exists with the Summit lift at Solitude. As indicated in REC-DC-35-3, the Sol-Bright lift may also increase traffic to the Twin Lakes area, and on to Silver Fork, from Brighton. The Twin Lakes Pass area currently receives extensive traffic from resort and backcountry skiers from LCC and BCC. While it is one of the most heavily utilized sites in the Wasatch it would still remain as an undeveloped backcountry area. Sections 4.4.5.2.2 and 4.4.5.2.3, Recreation, of the EIS provide a detailed discussion of potential effects of both these lifts. See also Response to Comment PRO-DC-208-3.

REC-DC-102-1 I recognize the need of the ski area to replace old existing lifts and improve trails in the existing permit area aside from Honeycomb Canyon. If I had to choose among the Alternatives I guess alternative four would best serve the public’s interest.
Response: Thank you for your comment.

REC-DC-63-2 If the traverse out of Honeycomb Canyon is too flat, why not reroute the trail rather than build a lift?

Response: Re-grading the Honeycomb return trail, with or without construction of a lift, is an option available under Alternatives 2, 3, and 6. The proposed lift is located on private land, and the decision to allow installation of the lift would be made by Salt Lake County.

REC-DC-46-1 In addition, Honeycomb Canyon would be more accessible to non-expert skiers if there was a lift from the top of the canyon to the bottom, eliminating the long and dangerous cat track return to the existing high-speed quad.

Response: The Honeycomb Return lift would not take skiers and snowboarders to the top of Honeycomb Canyon, but would take them from the bottom of the canyon up to lower Eagle Ridge. It would not affect the character of the terrain in Honeycomb but is proposed to eliminate the need to use the long cat-track to return to the resort. Section 4.4.5.2.2 of the EIS provides a detailed discussion of potential effects of lift and trail developments.

REC-DC-52-1 Solitude's skiable terrain is small, they cannot handle new quads or a lift out of Honeycomb... the mountain will be crowded and all moguls.

Response: Solitude prepared a Master Development Plan in which existing and future skier circulation was analyzed to insure that a high quality skier and boarder experience is maintained. Quad lifts would increase the potential to accommodate more skiers on trails at one time and the effects are discussed in Recreation, Sections 4.4.5.2.2 and 4.4.5.2.3 of the EIS.

LIFT UPGRADES

REC-DC-9-1 Having studied the "MDP" there are a few items which need be accomplished now for the survival of Solitude. Lifts must be upgraded. 25 years old. Moonbeam, Apex and Powderhorn maintained to be serviceable and safe must be allowed to be replaced and realigned to better serve the public. Who should answer should a disaster happen due to equipment failure? Solitude is not delaying the replacement. Who is?

Response: The safety and serviceability of any lift at a ski resort on Forest Service lands is overseen through bi-annual safety inspections by the Forest Service and the State of Utah Tramway Engineer and through consistent maintenance by the resort. Lift safety will in no way be compromised regardless of the decision reached at the conclusion of this process. The effects of new and upgraded lifts are discussed in Section 4.4.5.2.3 of the EIS.

REC-DC-35-1 Replacing Apex and Powderhorn with quads. I don't understand the rationale behind this. The only time I have ever seen a line on these lifts is when the Eagle Express quad is broken down.

Response: There are a number of reasons for replacing a chairlift, including factors such as age of lift and limited uphill capacity relative to terrain it serves. Both of the lifts referred to are old
and are ready for replacement. Employing the latest lift technology (quads) as replacements would provide for a better balance between the uphill capacity of the lift and the downhill capacity of terrain served, reduce lift ride times, and enhance the recreational experience. Section 4.4.5.2.3 of the EIS provides a detailed discussion of the effects of lift upgrades.

REC-DC-35-2 Given Solitude’s paltry annual skier visit count (177,251 skiers for the 1999/2000 season), there are not enough skiers and boarders to even create congestion at the base of Apex and Powderhorn.

Response: Please see Response to Comment REC-DC-35-1.

REC-DC-6-8 Because Honeycomb Canyon is at the far west side of Solitude, skiers could use the new Honeycomb lift to access areas past Solitude’s boundary in Silver Fork and beyond. This area should be required to be clearly posted as off-limits.

Response: The Honeycomb Return Lift brings guests to Eagle Ridge and back into Solitude. The easiest access to Silver Fork from Solitude will continue to occur via the Summit lift. See Response to Comment REC-DC-208-7.

REC-DC-6-1 The DEIS suggests many factors that could account for the under-utilization of Solitude. These suggestions all imply that further developments would eliminate under-utilization.

There is, however, a far more significant and obvious factor that influences utilization. The DEIS (Appendix K-5) admits that the basic resource of a ski area is the skiable terrain. Skiers avoid terrain and snow conditions they find dull or unpleasant and seek terrain they find interesting and enjoyable. It may be that skiers find Solitude’s terrain to be less enjoyable than the higher altitude, more open and varied terrain they can find at Alta, Snowbird, and Brighton. No amount of development will affect this factor. Although this planning axiom is described in Appendix K, the DEIS fails to analyze the very real possibility that the proposed developments might not increase Solitude’s utilization at all.

Response: It is difficult to presume that the quality of Solitude’s terrain is the primary factor in reduced utilization. Skier and snowboarder resort preferences are determined by many variables, including the price of the lift ticket, the number and types of lifts, snowfall, base and mountain facilities, ski school, as well as the terrain. These variables must be factored with the characteristics of the visitor which may include their skiing ability, need for family services, local or destination visit needs, overnight accommodation needs, food service needs, and the price range they are looking for. Terrain at the other resorts referred to have not changed significantly over the course of the last decade, yet all have seen some erosion in skier visits at times in recent years. However, witness the growth in skier visits in Summit County. These resorts also lack the high elevation, open bowl terrain and snow quality offered at the Cottonwood Canyon resorts. Yet they are able to provide a product and experience to their clientele, including skiing other recreational activities.

The effects of the various alternatives on the skiing and recreation experience as discussed in Section 4.4.5, Recreation, of the EIS. See also Response to Comment SO-EC-DC-6-1.
MOUNTAIN BIKING

REC-DC-19-1 After watching the recent mountain bike races at Deer Valley, I shudder to think that some day similar races could be held in Honeycomb Canyon. What would the impact of such a race be upon animals, plants, air quality and the watershed?

Response: Solitude currently hosts a few such events on the main mountain. The resort submits a Summer Operating Plan each season that includes proposals for a number of items including annual facilities maintenance and improvements, and hosting special events. We review, approve and/or deny components of the Summer Operating Plan based upon a careful review of impacts including those to the environment. The effects of the mountain bike trail in Honeycomb Canyon are discussed in the EIS in Sections 4.2.1.2, Water Quality, 4.2.2.2, Soils, 4.3.2.2 and 4.3.2.3, Vegetation, 4.3.3.2, Wildlife, and 4.4.5.3.2, Recreation.

REC-DC-47-1 Additional mountain biking and hiking trails would be great for the warmer seasons. This seems to be a good way for mountain resorts to keep people interested in visiting during the non-ski seasons and therefore allow them to thrive. We hike often in Big Cottonwood Canyon, but find ourselves driving down to the other trailheads. It seems it would cut down on traffic if those of us staying at Solitude could hike and bike more from outside our door.

Response: Effects of hiking and mountain bike trails on recreation and transportation are discussed in Sections 4.4.5.3.2, Recreation, and 4.4.2.4.2, Transportation, of the EIS.

REC-DC-208-1 There are extensive options for mountain biking opportunities elsewhere and Solitude development is unnecessary.

Response: Mountain biking in the Central Wasatch area continues to grow in popularity. Additional mountain biking opportunities meet the increasing demand for mountain biking in an existing developed setting that provides restrooms and other facilities. The purpose and need for mountain bike trails is found in Section 1.3 of the EIS. See Response to Comment REC-DC-19-1 for discussion of potential effects of the mountain bike trails.

REC-DC-208-2 Snowbird allows mountain biking, Brighton will, Park City & The Canyons have extensive trail systems including beginner terrain which contrary to DEIS assertion (3.94) that it’s lacking is widely available both on and off the forest including sections of shoreline trail, Jordan River Parkway, City creek canyon, areas in the Oquirrhhs etc. and is unjustified and unnecessary at Solitude.

Response: You are correct in asserting that there are many available mountain bike trails for a wide range of ability levels in the region, although terrain in BCC does tend towards expert. The EIS will be revised to reflect this. See also Response to Comment REC-DC-208-1.

REC-DC-208-3 Another unaddressed problem with the mountain biking proposal would be providing access to areas outside Solitude not currently receiving mountain bike impacts.
Response: If approved, Solitude would only be allowed to construct mountain bike trails as described in the EIS. The proposed alignment of the Honeycomb trail would not provide access to points beyond Honeycomb Canyon that are not currently accessible from existing trails or roads. It is acknowledged that unauthorized trail construction by private citizens, providing access to other areas, could occur. Please see Response to Comment REC-DC-4-2 for proposed mitigation measures.

REC-DC-208-4 Expanded mountain biking could make this trip common especially with guided mountain biking which Solitude is apparently permitted for and is not mentioned in the DEIS.

Response: The intent of the existing and expanded mountain bike trail system is to offer this amenity within Solitude’s SUP and not to facilitate trail development outside of the permit area. Any existing or future guided mountain biking services would also be contained within the SUP unless Solitude requests a change to their Summer Operating Plan. See Response to Comment REC-DC-4-2 for proposed mitigation measures to prevent trail pioneering.

REC-DC-1-3 The City opposes the construction of single track mountain bike trails and the cumulative impact this new use would have on the carrying capacity of the canyons. These mountain bike trails need to be studies more extensively looking at the canyon wide impacts they may cause.

Response: For a discussion of the impacts in Honeycomb Canyon associated with the proposed mountain bike trail, refer to the EIS in Section 4.4.5.3.2, Dispersed Recreation, Section 4.2.1.1, Water Quality, Section 4.2.2.2, Soils, Section 4.3.3.2, Wildlife, and Section 4.3.4.2, Biodiversity.

REC-DC-4-1 The proposed trail is located primary on soils with “very high” erosion hazards, including along the intermittent creek in Honeycomb Canyon. Mountain bike trails almost invariably result in unintended social trail development. Because the majority of the proposed trail is on fragile soils, these social trails could have a disproportionate adverse impact on soil stability and vegetative cover. The EIS should indicate whether there are mitigation steps available to prevent or reduce the occurrence of social trail development.

Response: Section 2.6.6, Recreation, and Section 2.6.11, Vegetation, of the EIS list mitigation measures proposed to manage social trail development.

REC-DC-4-2 The bike trail appears to cross the intermittent stream in Honeycomb Canyon approximately nine times. We could not find any statement regarding whether there are wetland impacts associated with these crossings. Further, this reviewer is unfamiliar with the topography of the canyon. Would it be possible for bikers to pioneer trails along the creek channel or adjacent to the channel, thereby indirectly effecting wetland resources?

Response: Please see Response to Comment REC-DC-4-1 for mitigation of trail pioneering. The topography along the creek is generally too steep to create a trail that parallels its alignment. Section 2.6.13 of the EIS, Wetlands and Riparian Areas, discusses mitigation measures for the bike trail crossings in wetland and surface water areas. See also Response to Comment WAT-DC-4-1 for a discussion of potential wetland impacts associated with stream crossings.
The proposal is to increase the bike trails by 6.2 miles going up Honeycomb Canyon or increasing the total mileage by 22%. No analysis is given in the DEIS that current or future demand justifies such an expansion. The DEIS does not have a map that clearly shows the current 27-mile trail system and how it relates to the new proposed 6.2-mile track. Furthermore, only the Honeycomb Canyon proposed improvements are shown in DEIS Figures 2-2 through 2-12. The entire new bike path, as well as the old system, should be illustrated for public review.

Response: The illustrations in the EIS will be revised to reflect your comment. Please see Response to Comment REC-DC-208-1.

The section on air quality in the DEIS (p. 3-12) does not discuss the effect a new bike path in Honeycomb Canyon would have on air quality. At a recent mountain bike race the Salt Lake Tribune on June 30, 2001 reported that: "...racers complained of breathing and visibility trouble, as Deer Valley’s thick, choking dust floated out of fast developing ruts. . ." The DEIS should analyze this problem.

Response: Please see Response to Comment REC-DC-19-1.

Because of the remoteness of the new bike trail through Honeycomb, it poses new safety problems for the current bike patrol (DEIS p. 3-93) that consists of only two people. If the new bike trail is approved, mitigation measures should include increasing the bike patrol to match the challenge of patrolling the new area.

Response: Section 2.6.6 of the EIS indicates that a mountain bike monitoring plan would be developed in conjunction with the Forest Service which includes an adequate mountain bike patrol.

Another possibility is that Solitude could choose to run the Summit lift in addition to the Sunrise lift in the summer. This would make getting to the top vastly easier and dump many hikers and bikers into the pristine Honeycomb Canyon. . . The impacts to adjacent areas beyond the permit area should be analyzed in the DEIS.

Response: Any change to summer operations would need to be submitted to the Forest Service, as part of the Summer Operations Plan, for approval. Approval would be contingent on analyzing and mitigating any potential environmental impacts.

SUMMER RECREATION

There is already a need for additional restroom facilities in Big Cottonwood Canyon which can be open and well maintained year-round. The increase in the popularity of mountain biking, hiking, rock climbing, etc., which bring many people on to the mountains in the summertime necessitates immediate attention to this critical issue. Our opinion is that until this problem is addressed and solved, an additional attraction to bring more people on to the mountain, such as an Alpine Slide, seems to be an irresponsible proposal. Attention to this issue is essential to ensure the protection of the watershed.
Response: All of the alternatives analyzed in the EIS propose to increase restroom facilities within the base area(s) to accommodate existing and anticipated visitor growth at Solitude. Adequate restroom facilities would be required for any summer operation authorized under the Summer Operating Plan. Any discussion of facilities on public or private lands outside of Solitude’s SUP area are beyond the scope of this analysis but the importance in protecting the canyon’s watershed is noted.

REC-DC-185-1 I question the need for enhanced summer recreation opportunities as proposed in the MDP Update Draft EIS. I agree that the canyon attracts “large numbers of summertime outdoor enthusiasts who enjoy hiking, camping, fishing, picnicking, mountain and road bicycling and pleasure driving” (EIS p. 1-6), However the proposed expansion of Solitude would detract rather than enhance these opportunities.

Response: The summer recreation opportunities proposed at Solitude are conceived to broaden the range of recreational opportunities available to both Solitude guests and visitors in BCC. People who use the canyon for recreational activities in a generally undeveloped or “pristine” environment may not appreciate the developed recreation opportunities at Solitude. They do have many options to recreate elsewhere in the canyon. Others who participate in activities at more developed recreation areas, like Solitude, may feel that an activity such as an alpine slide or a lift ride could enhance their overall recreational experience in BCC. The purpose and need, and the potential effects, of summer recreation activities at Solitude are discussed in Sections 1.3, 2.5, and 4.4.5.3.2 of the EIS.

REC-DC-200-1 Let Big Cottonwood Canyon remain a beautiful area for hikers and picnickers and people like us who just like to take a drive up the canyon to marvel at the pristine scenery in every season of the year.

Response: Solitude and Brighton are, and have been for many years, developed winter recreation sites and are part of the numerous managed uses allowed in the canyon. Potential effects to canyon visitors are discussed in Section 4.4.1, Visual Resources, and Section 4.4.5, Recreation, of the EIS.

REC-DC-208-5 Another problem unrecognized are the new summer mountain toys. Mountain boards (skateboards with all terrain tires and hand brakes) are rented at several locations in the valley, require a lift assist to get a good run in and are unmentioned in DEIS. The mountain boarders may actually provide majority of summer lift use and this sport requires assessment. A more recent development still primitive is a prototype known as the crossrate which is rollerblades with large all terrain tires and because of lack of mobility and weight is also a downhill lift assist and is also ignored in DEIS. Any decision regarding lift served mountain biking which doesn’t include these other toys is irrelevant, and because impacts of these are unaddressed.

Response: The activities referred to are not currently permitted at Solitude under their Summer Operating Plan. These types of activities could only be allowed on current and future (approved) mountain bike trails after appropriate environmental analysis and authorization in the operating plan. None would be allowed on open ski trails or other terrain not specifically developed for bikes or other recreation activities.
GENERAL

REC-DC-10-1  I would like to stress that I do not think our public lands will benefit the widest possible audience by further development for this type of recreation. I base this on three things, 1) irreversible loss of natural ecosystems, 2) snow sports are not a sustainable recreation opportunity, 3) ski resorts do not offer equal opportunity to all members of the population.

Response: Section 4.7 of the EIS indicates that there would be some loss of resources during the life of the resort but in general there would be no irreversible commitment of forest resources. Those resources would largely be restored should the resort stop operation. Developed snow resort sites have been in operation on public lands for over 50 years and so may be considered "sustainable recreation" for this analysis. The ski resort industry generally provides opportunities for all members of society particularly to those needing special access considerations, a requirement for ski resorts operating on public lands. We acknowledge that not all segments of the population will have all their recreational needs and expectations met in all areas of the National Forest. We manage recreation opportunities using the Recreation Opportunity Spectrum (ROS), which provides for a range of opportunities in various settings. ROS and the effects on recreation are discussed in Section 3.4.5.1, General Recreation, of the EIS. See also Response to Comment PUR-DC-10-1.

REC-DC-20-1 First and most egregious is the provision allowing Solitude to expand its permit area by 36 acres to include the Redman lift expansion, new parking lots, and access lift. Solitude already has ample room to operate.

Response: The determination of whether or not Solitude already has ample room to operate will be made by the Forest Service and outlined in the ROD. The purpose and need of the proposed expansions are described in Section 1.3 of the EIS. Effects of permit boundary expansion in relation to the Forest Plan are discussed in Section 1.6.1.1 of the EIS, Forest Plan consistency. Effects of improving existing lifts, trails, and parking lots and constructing new lifts, trails, and parking lots are discussed in Section 4.4.5.2.3 of the EIS.

REC-DC-104-1 Solitude is not going to expand their terrain!!!! What possible reason does any environmental group have to try to obviate these plans?? Solitude is a great resort, but it needs to do certain upgrades and improvements in order to stay competitive, but more importantly, to provide a safe facility for all of us to enjoy.

Response: Several of the alternatives propose to expand the SUP area, widen existing trails, and construct new trails. The purpose and need of the proposed expansions, upgrades, and improvements are described in Section 1.3 of the EIS. Effects of permit boundary expansion in relation to the Forest Plan are discussed in Section 1.6.1.1 of the EIS, Forest Plan consistency. Effects of improving existing lifts, trails, and parking lots, constructing new lifts, trails, and parking lots, and expanding snowmaking are discussed in Section 4.4.5.2.3 of the EIS.

REC-DC-123-1 Solitude's master plan includes changes that would make it easier for patrons to access and use the facilities. The plan encourages use of public mass transit systems, more efficient parking, and lighting that will encourage off-peak usage of the resort.
Response: Thank you for your comment.

REC-DC-20-2 Second, Solitude proposes a major divergence from a mere ski area permit.

Response: The proposal to merge the alpine and Nordic operation boundaries into a single 40-year permit is not unusual. Forest Service management direction for all ski resorts under its jurisdiction is to combine annual and term permits into a single 40-year permit. As Solitude owns both the alpine and Nordic resort operations, it makes sense from the standpoint of administration to combine them into one permit. However, each operation will still maintain “separate and mutually exclusive internal boundaries.”

REC-DC-139-1 Less development can also be good development. The very name of their resort “Solitude” depicts a place where skiers can go to get away from the crowds. Yet much of the development they wish to make will do nothing but increase traffic in currently unspoiled terrain.

Response: It is true that Solitude's proposed actions are intended to increase skier traffic on their ski terrain. Solitude believes that it must increase skier visitation to return to economic viability.

REC-DC-244-1 Due to the already heavy use of two ski resorts in the canyon we suggest that snowmobiles and ATVs be totally banned up this canyon except solely to access one's cabin in the winter.

Response: Motorized recreation use in BCC is outside the scope of analysis for this project except in the context of cumulative effects. Areas permitted and/or designated for motorized recreation are addressed in the WCNF Forest Plan (USDA-FS 1985) and are regulated by the Forest Service in accordance with WCNF travel management planning.

REC-DC-254-1 A major concern of mine is the guideline use of the 4,900 square foot helicopter pad/helicopter.

Response: The 4,900 sq. ft. landing pad represents a square footprint measuring 70 feet on a side and is proposed to be located on the roof of the Resort Operations Center. The landing pad is only proposed for emergency use and would not be authorized for any additional functions.

REC-DC-208-6 Solitude’s new winter outfitter guide concession is unmentioned in the DEIS.

Response: Solitude has held an outfitter/guide permit as part of their Nordic SUP since 1993. During the 2000-2001 season Solitude initiated use of the permit. The EIS will be adjusted to acknowledge this use.

REC-DC-40-1 Moonbeam Center is inadequate for guest services. Ski school takes up almost all the available space. Things I think ski school can improve... relocate locker from
upper lot to Moonbeam center. Have a large kids room. Have a waiting room for parents. Give ski school a break room with a changing area and showers.

**Response:** See Response to Comment REC-DC-142-1.

**REC-DC-54-1** This new proposal would increase the noise, activity and lights, further limit our view and the accessibility to our home from the ski slopes, as well as exacerbate the many other problems we have already had to put up with.

**Response:** Solitude is proposing to change many aspects of their current operation as they shift from a largely day use resort to a destination resort. As a result, the number and types of activities at Solitude are expected to increase. For adjacent neighbors, particularly those in close proximity to the Village Center, this may well be perceived as a problem and inconvenience. Effects from noise, activity, and lights are discussed in Sections 4.2.4, Noise, and 4.4.5.2.3, Recreation, in the EIS. See also Response to Comments VIS-DC-54-1 and NOI-DC-54-1.

**REC-DC-56-1** We oppose any extension of time or area of their Nordic permit and, as I understand it, they have no optional plan other than the status quo. I shall strongly oppose and shall elicit the support of other Silver Lake Estate share holders not to renew anymore year to year rights.

**Response:** Thank you for your comment. Please see Response to Comment REC-DC-20-2.

**REC-DC-5-1** Resort Operations Center: SL Co Fire Station: The Salt Lake County Fire Department’s has issued a requirement that no further development occur until a fire station has been constructed. If alternative 1 were approved no further development on Private land would be allowed. [Foothills and Canyons Overlay Zone ordinance (FCOZ)]

**Response:** Regardless of the decision reached by the Forest Service, Solitude would be required to comply with conditions set forth in the Foothills and Canyons Overlay Zone of the Salt Lake County Zoning Ordinance in implementing any private land development. See also Response to Comment PRO-DC-5-1.

**REC-DC-5-3** The FCOZ ordinance does not specifically prohibit the use of RV Hookups however this use as proposed at an existing Ski Resort seems out of place and not necessary due to the large amount of short term housing being provided by the resort and the close proximity to ‘camping’ areas in the canyon. It seems counter-productive to allot space to RV’s when parking for the resort activities is at a premium and an expansion of parking areas is being requested.

**Response:** The proposed RV hook-ups are on private land and would require approval from Salt Lake County. RV parking spaces would reduce overall available parking. Effects of RV parking are discussed in Sections 4.4.2.3.4, RV Hookups, and 4.4.5.2.3, Recreation, in the EIS. See also Response to Comment TRAN-DC-5-7.

**REC-DC-6-13** Solitude is proposing to combine its separate Nordic and alpine ski area special use permits into one 40-year Ski Area Term Special Use Permit. . . The most immediate
area of concern involves the four-season resort concept that ski areas are so anxious to implement so that the authorized amenities arising therefrom promote and complement their real estate development ventures. Given all the reasons stated in this document (watershed, wildlife and ecosystem values, urbanization, noise, traffic, increasing congestion, etc.), the four-season resort goal is totally inappropriate for Big Cottonwood Canyon, which already receives the most year-round use of any canyon in the Wasatch-Cache National Forest.

Response: Please see Response to Comment REC-DC-20-2 regarding the combining of special use permits. The combining of these permits is for administrative purposes not related to Solitude’s proposed transition to a year-round resort. The Wasatch-Cache National Forest and BCC currently provide year-round recreation opportunities. Concentrating existing canyon recreation use and the ability to meet some degree of demand for year-round recreation use may reduce impacts on other canyon areas that do not provide developed facilities or restrooms and may reduce impacts to the physical and biological environments in these areas. Effects of year-round recreation activities are discussed in Sections 4.4.5.3.2 and 4.4.5.4 in the EIS. See also Response to Comment LU-DC-6-5. Please also see Response to Comment LU-DC-6-7.

REC-DC-27-2 Redman Lift: Solitude is in need of first-time beginner terrain as evidenced by the huge success of Easy Street. A large and growing demand. Accessible base area terrain for beginners and first-timers to learn on; terrain that at Solitude virtually does not exist. The identification of Redman lift and run satisfies that requirement. There are further measures that can be taken such as removing the lift chairs from the cable in the summer and removing at this time the night light proposal for this run.

Response: The purpose and need for the Redman lift and trail, as well as potential effects of the lift and trail are discussed in Sections 1.3, Purpose and Need, and 4.4.5.2.3, Recreation, in the EIS. See also Response to Comment PRO-DC-5-2.

REC-DC-27-8 Alternative 6 states the minimum trail width to be an average of 75 feet. Proposed action Alternative 2 requested 120 feet. The minimum industry standard indicates it needs to be 100 feet.

Response: Industry standards are guidelines to provide ski area managers and owners with general information to assist with the management and operation of a resort. They are not established mandates nor are any standards enforced by industry or land management agencies. The effects of the two trail widths are discussed in Sections 4.4.5.2.3 and 4.4.5.2.7 of the EIS.

REC-DC-42-1 If additional services are needed south of the Giles Flat area, I suggest a new building be built where the old A-frame, bathrooms, ski shop, ski patrol and ski school used to be: between the Village and the Sunrise Lift. That would be far enough to the south to not be in as close proximity to any homes as the Last Chance is now. That would make more sense anyway, because the pond they originally built for the purpose of winter ice skating is in that area already. It would provide bathrooms and facilities in a convenient place for the winter activities and for the Alpine slide in the summer. The facilities would be just as accessible there as at the Last Chance area, and would not infringe on the view, accessibility, or serenity of the Giles Flat homeowners. I think this would let Solitude accomplish their goals without interfering so much with the rights and peacefulness of its neighbors.
Response: Please see Response to Comment REC-DC-142-1. Please also see Response to Comment ALT-DC-42-1.

SKIER DEMAND

REC-DC-156-1  The WCNF must not continue to use the outdated and inaccurate winter user numbers (1993 BCWRS). If the WCNF does not have reliable user numbers, decisions should not be made that require the assessment of impacts to other winter users, until these impacts are actually known.

Response: The EIS employs the most current information available for the analysis. Incorporating use estimates from other ski area and outfitter and guide environmental analyses in conjunction with the 1993 BCWRS report provides an adequate basis and disclosure of impacts for the proposal. At this time, the 1993 BCWRS research provides the most current backcountry use data on the Wasatch.

REC-DC-19-2  The DEIS, in trying to explain evidence to the contrary says on page 3-104 “A common aspect of the ski industry is that, under favorable market conditions, demand normally follows supply, rather than preceding it,” the DEIS does not define what “favorable market conditions” are. Supply does not create demand, just because you build a widget factory or a ski resort, it does not follow that demand will be sufficient to buy the supply. The DEIS gives only one example, that of Brighton and claims that Brighton’s utilization rate has increased “partly” as a result of the implementation of their 1991 master plan, the DEIS does not quantify what part is attributable to improvements and does not give Brighton’s utilization rate prior to 1995 for comparison, nor does it discuss other factors that may increase utilization, such as marketing.

Response: Favorable market conditions would include items such as proximity of the resort to a large population center, favorable highway access and safe travel, proximity to a major airport, and a growing population. Solitude exists in favorable market conditions, albeit competitive ones. The discussion in Section 3.4.5.3 of the EIS has been expanded to further address this issue. See also Response to Comment SO-EC-DC-63-1.

REC-DC-6-14  The DEIS makes the statement: “A common aspect of the ski industry is that, under favorable market conditions, demand normally follows supply, rather than preceding it. Accordingly, ski areas have historically witnessed their most substantial increases in skier visitation (demand) following significant improvement and/or expansion (supply) as has been evident at Brighton.” (p. 3-104). The qualification “under favorable market conditions” is in fact an admission that there is no demand to be satisfied, hence no need to increase skier services, as the downhill skier market has been fundamentally unfavorable over the last decade, as evidenced by the lack of growth in skier visitations.

Response: Please see Response to Comment REC-DC-19-2. The EIS indicates that state-wide, skier visits have been growing at about 2% annually for the past decade. During this time-period some resorts have seen skier visit growth well in excess of 2%, while others have seen virtually no change or a decline in their skier visits. All of the resorts that have experienced growth in skier visits, in excess of statewide growth, have made significant infrastructure improvements,
including high-capacity lifts, snowmaking, expanded terrain, and improved skier support services. The effects on skier demand are discussed in Section 3.4.5.3, Recreation, in the EIS.

REC-DC-6-55 The DEIS (pp. 3-100 to 3-104) uses data from the “Utah Skier Visit Analysis” (May 1998) and from the “Utah Ski Database” . . .

The DEIS concludes that total skier visits throughout the United States are likely to remain between 50 and 55 million skier visits for the foreseeable future. . . Snowboarders are counted in the number of skier days. If one takes these out, one finds that the number of skier days would be in sharp decline in the United States. . . The “Utah Skier Visit Analysis” does not discuss or build snowboarders into its models but assumes they are the same as skiers. The DEIS does not differentiate here either.

Response: The GOPB study did not differentiate between the type of activity a ticket-purchasing guest participates in when coming to a resort, whether they are alpine skiers, snowboarders, or telemark skiers. Growth in skier visits was projected for both resident and destination skiers. With respect to resident skier visits, it has been documented that a percentage of the entire skiing age population (15-44) participates in some aspect of “snow sports” at a ski resort. This population cohort is growing state-wide and so will be responsible for some portion of future skier visit growth. Destination skier visit growth projections were based upon time and snow quality. The study assumes Utah’s market share of the total U.S. skier market will grow due to ease of access to resorts from the Salt Lake International Airport and major interstate highways. It also assumes that snow conditions will affect how many destination skiers come in a given year. Favorable snow conditions have often translated into higher skier visits. This assertion has been borne out by the 2000-2001 season in which U.S. skier visits grew to 57 million. Snow conditions were exceptional in many parts of the country and the skier market responded accordingly. The effects on skier demand are discussed in Section 3.4.5.3, Recreation, in the EIS.

REC-DC-6-2 The DEIS in Table 1-1 (p. 1-7, under Purpose and Need) explains that “. . . improvements are proposed to address skier safety, congestion, and circulation in certain areas, to enhance the skiing experience, and to meet the demand and expectations of existing and future skiers.” . . the DEIS has not specified exactly which areas are unsafe at the present time nor does it give statistics to prove its assertion. Further, the DEIS, does not tell which improvements are designed to reduce accidents . . The DEIS does not state in detail how it has measured what improvements are expected or wanted by skiers. Many customers seem quite happy with what is currently available at Solitude and return year after year. The only condition specified in the Forest Plan that justifies expansion is when current demand exceeds the available supply.

Response: Although Solitude does receive return visitation from some guests, their skier numbers show a downward trend over the past six years. The quality of the recreational experience embodies the primary reason why skiers frequent a particular ski area. Among the contributors to a quality recreational experience, terrain and snow surface are consistently listed among the most important reasons. Specifically, of skiers/snowboarders surveyed the 1996 National Skier/Boarder Opinion Survey, 25% and 15% listed these two items as the most important resort features (out of a list of 24) in deciding where to ski.
Regarding developed alpine ski areas, the Forest Plan provides additional direction that: “Area improvements will be evaluated by an interdisciplinary team to verify that they meet resource objectives and that adequate mitigating measures are incorporated into the projects” (USDA-FS 1985, p. IV – 231). All trail modifications are proposed within the existing permit boundary. It is the responsibility of ski area management to continually monitor and identify areas on the mountain that need attention to address safety and circulation issues. Forest Service Snow Rangers, as part of their duties in monitoring the operations, work with ski area management to understand operational issues and help find solutions to operational issues and problems. Often, most circulation and safety issues can be resolved by signing or other operational procedures such as grooming, snowmaking, brushing/limbing, or even closing trails during certain times. In some cases, the ability to make snow, or additional natural snow, will decrease the potential for problems and potentially reduce the need for further permanent modifications. In other cases, permanent modifications provide long-term solutions, enhance skier experiences, and reduce operational costs and impacts on equipment. The purpose and need for trail modifications and their potential effects are discussed in Section 1.3 of the EIS.

REC-DC-6-3 The DEIS makes a number of comparisons to Brighton. But the DEIS fails to compare and analyze why Brighton (other than to say that infrastructure improvements since 1999 are the cause) has enjoyed a large increase in skier market share while keeping its SAOT and CCC allocations at levels very substantially lower than the SAOT and CCC projections under any of the Solitude alternatives, other than Alternative 1. Just what combination of advantages does Brighton enjoy vis-à-vis Solitude? Is it due to its advertising, terrain, food service, altitude, snow, parking, chairlifts, lift prices or any number of other variables? The DEIS does not make any effort to analyze these variables. The DEIS ought to study this issue in depth, including skier surveys, if it wishes to validate its conclusion that the master development plan proposals are indeed warranted at Solitude.

Response: There are variables that directly affect skier visits and may be analyzed including items such as lifts, food service space, and amount of parking. Section 3.4.5.3 of the EIS makes the assertion that resorts which provide high-quality infrastructure improvements, such a high speed quad lifts, and skier support services often improve their skier visits and market share. Brighton was used as an example of this assertion. Other examples supporting this have been incorporated into Section 4.4.5.2.2, Recreation, in the EIS.

J. SOCIOECONOMICS

SKIER DEMAND PROJECTIONS

SO-EC-DC-396-1 In May 1998 the Governor’s Office of Planning and Budget (GOPB) completed the Utah Skier Visitation Analysis (USVA). . . a set of models and forecasts of skier visitation trends for Utah resorts. The WCNF has used the USVS forecasts in previous EISs to support Records of Decision (RODs). The forecasts are now being used, with modifications that further invalidate them, in the Solitude MDP DEIS.

The USVA contains serious errors of statistical methodology. Its forecasts are now five years out of date. The models have proven to be inaccurate forecasting tools. Therefore it should no longer be used.
Errors caused by its use should be identified and mitigated. The WCNF should find a more objective source for new skier visitation forecasts, and subject those forecasts to peer review.

**Response:** This comment summarizes the opinions expressed by several commentors regarding the skier visit projections developed by the GOPB and used in this analysis. The letter from which this comment was extracted provided the most comprehensive and technical critique of the GOPB figures and the process through which they were derived. We provided a copy of this letter to the GOPB and asked that they develop a response and submit it to us. Their response has been included in the project file (GOPB 2001) and is summarized in less technical terms below.

In 1996, the four Cottonwood Canyons ski resorts operating under permit on the WCNF were starting the process of updating their required master plans. We recognized that skier visit projections would facilitate NEPA analysis and other administrative review of the proposed updates. The agency was familiar with projections made by the state in the past and asked the GOPB to conduct a new analysis, generating statewide projections that incorporated proposed plans at the four Cottonwood Canyons resorts. We provided information requested by the GOPB and reviewed interim findings at several key junctures.

The analysis was completed in May 1998 and documented in the *Utah Skier Visit Analysis* published by the GOPB. That report is the source of skier projections used in the Snowbird, Brighton, and now Solitude master plan NEPA analyses. For the Solitude analysis, the GOPB adjusted the initial projections somewhat in response to actual skier visit counts since the report was published. The report's initial projections and the revisions made for the Solitude NEPA analysis are the target of this commentor's concerns.

The letter from which this summary comment was extracted is very lengthy and detailed. Rather than responding to each technical point the letter raises here, we address the more fundamental issues from which these detailed technical points stem. This approach is more useful, informative, and efficient.

The commenter makes two central points regarding the GOPB's projections: (1) their forecasting procedure is irreparably flawed, and (2) the forecasts used in the DEIS are too high, and a new study should be done by a neutral party.

Regarding the GOPB forecasting procedure, a distinction must be made between statistical modeling done for scientific purposes and that done to assist in formulating public policy. Scientific modeling is generally done to further our understanding of complex processes. It is based on the classical statistical framework, which includes rigid assumptions and restrictions that must be met for the model to be valid. The objective is to identify all the variables that interact to produce a given outcome. Once the variables have been identified, they are incorporated into an equation that reflects the perceived relationship among them, and a projected outcome is forecast. That outcome is then compared to what actually occurs, variables are modified in ways intended to improve the accuracy of the forecast, and the model is run again. This process is repeated until the forecast outcomes approximate the actual outcomes, and the process is understood.
This procedure is typically not feasible for public policy applications, where the objective is to try to give planners and policy makers a glimpse of the future and an idea of how the options they are considering might play out. Complete understanding of the processes at work is generally neither possible nor necessary. The statistical assumptions and requirements of the classical statistical framework typically are not met. A few key variables are selected on the basis of (1) their logical relationship to the quantity being forecast and (2) the ready availability of data on the input variables. Repeated runs to refine the model are generally not possible, and the precision in forecasting sought in the scientific setting is rarely achieved. Limited time and funding, coupled with constant change in the forces affecting human behavior, which is typically the target of forecasting in the realm of public policy, demand a faster, less intensive forecasting procedure, and lack of precision is often the price.

If the results of such forecasting procedures prove too inaccurate over time to be useful to planners and policy makers, the input variables and the perceived relationships among them are reviewed to find an explanation. If the explanation is unknown or lies outside the modeled variables and relationships and cannot be incorporated, it is accepted practice to roll the forecast ahead intact—to project the same forecast from a new starting point. Unless there is some logical reason to change it, this procedure still provides the best forecast possible under the circumstances.

The GOPB's skier visit forecasts are typical of this approach. Skier visits, particularly destination skier visits, are difficult to project. There are simply too many climatic, social, and economic variables at work, as reflected in the great year-to-year variability in resort-specific or nationwide skier-visit figures. With this background in mind, the GOPB skier-visit forecasting procedure is not inherently flawed. It does not hold up to the scientific standards on which this commentor based his review, but it was not intended to and in fact could not be for very practical reasons.

The Solitude EIS is the fourth occasion that GOPB has projected skier visits for policy purposes. The first projections were incorporated into the 1985 WCNF Forest Plan, the second into the 1988 Salt Lake County Wasatch Canyons Master Plan, and the third into the 1991 Brighton Master Plan EIS. The accuracy of these projections increased with each iteration. For the first 8-year period of each forecast, statewide projections showed error rates of 8%, 5.1%, and 2.8%, respectively (State of Utah 1998). While the error rate in the forecast for Solitude in the DEIS was substantially higher, we do not fault the GOPB nor their methodology for their efforts. Accurately projecting skier visits for a single resort over the medium to long term is extremely difficult.

The comment that the forecast figures used in the DEIS are too high is true. The original GOPB forecast for 1999/00 Solitude skier visits was 298,000, while the actual figure was 175,000, indicating an error of 41%. As noted above, rolling a forecast ahead is standard forecasting practice in the public policy realm when actual values have varied substantially from forecast values for unaccountable reasons. This was the case, and the GOPB figures were rolled ahead, shifting the base year for their projections from 1996/97 to 2000/01.

The skier visit value for that base year was 208,600. Now that actual figures for the 2000/01 season are in at 187,000 skier visits, we have another opportunity to recalibrate the model.
EIS has been revised to incorporate the original GOPB forecast profile using 2000/01 as the base year and the average skier visits over the past 10 years, 203,000, as the base value. This lowers the skier visits projected through the life of the project substantially. This adjustment retains the original GOPB forecasting procedure, employing a standard recalibration procedure to update the forecast. Specific, revised sections are identified in the following responses.

SO-EC-DC-63-1 Many of the projects in the proposed action revolve around the argument that the number of skier days (visits) at Solitude is going to increase sufficiently in the next decade. I'm not sure what, if any, data can support this argument. It is difficult, if not impossible, to make predictions into the future, so any reasonable estimate of the growth in skier numbers would have to come from growth observed at Solitude and the other Cottonwood Canyon resorts over a statistically representative amount of time. Several comments in the DEIS implied that the increase in skier visits to Brighton last winter was due to the infrastructure improvements at that resort; these comments are irrelevant and have no basis in scientific data.

Response: It is true that projecting skier visits into the future is difficult. The DEIS projected that skier visits are going to increase at Solitude in the future based on the analysis prepared by the GOPB (see response to comment SO-EC-DC-396-1), which was based, in part, on historic skier visits, resort utilization patterns, and population projections. As indicated in the GOPB study, over the 1985 to 1996 period, skier visits in Utah grew an average of 1.8% per year with much of that growth occurring in the destination market. However, the rates of growth at individual resorts varied widely over this time period.

In some cases, resort skier visits have been flat or seen a decrease, while others have experienced growth much higher than the state average. In every case, the resorts that have experienced higher rates of growth (such as Brighton and Snowbird) are those that have instituted infrastructure improvements.

Data used in the EIS has been updated to account for the slower growth of the skier market in recent years. Updated projections for Solitude show skier visits would increase from 203,000 visits in 2002 to 247,000 visits in 2010 under the Proposed Action. Over that period, skier visits would increase by approximately 21.7%, or 2.4% on an average annual basis.

SO-EC-DC-29-1 The GOPB study, and the way the DEIS uses it, is flawed and should not be used to project future skier visits to Solitude. The Forest Service has the obligation to meet certain types of currently existing demand for recreation. The Forest Service should not be in the business of allowing construction of facilities that are purported to be necessary for super-optimistic (and flawed) future skier demand projections.

Response: See Response to Comment SO-EC-DC-396-1. There is no indication that the methodology used in the GOPB study or the results of that study are flawed. It may be argued whether the assumptions behind the projections or the projections themselves are accurate, but we have determined that the GOPB analysis is reasonable. Since the release of the DEIS, the GOPB has updated their annual skier visit projections for Solitude. This updated information provides the basis for the skier projections in the EIS (see Sections 4.4.5.2.2 and 4.4.5.2.3). The updated skier projections are based on historical visitation levels over the past 10 years and the
projected level of growth identified in the GOPB analysis. Skier visits are projected to be 203,000 in 2002 and 247,000 in 2010 under the Proposed Action.

Section 1.3 in the EIS explains in detail the purpose and need for Solitude’s proposed improvements. In that discussion, increasing skier visits is only one portion of the overall purpose of and need for the project, not in itself the basis for the proposed improvements at Solitude.

SO-EC-DC-35-1 I believe the estimated skier days for the year 2011, even looking at the lowest figure (Alternative 1--338,100 skier days) are completely unrealistic. The demographic of people who ski and board is rapidly aging. Who says that the “down year” Solitude experienced in 1999/2000 (a 12.6% decrease when compared to the previous year) is not a long-term trend. Guess what, Solitude had another “down year” last year as well.

Response: See Response to Comment SO-EC-DC-396-1. The forecasting of skier visits at Solitude has been revised in the EIS. The forecasting values have changed based on the changes taking place over recent years and other adjustments to the model. The revised EIS incorporates the original GOPB forecast profile-using 2000/01 as the base year and the average skier visits over the past 10 years (203,000 skier visits used as the base value). This adjustment lowers the 2009/2010 skier visits projected for the No Action and Proposed Action to 221,000 and 247,000 skiers, respectively. This adjustment takes into account the recent years of fewer skiers and makes a more historically representative projection.

Regarding the demographic issue, the GOPB analysis included changes in the skiing-aged population in developing their projections.

SO-EC-DC-19-1 As an economist and trend watcher, I must tell you that skiing is losing its appeal among the populace. According to the National Ski and Snowboard Retailers Association, the percentage of the US population skiing has dropped from 5% of the population to 3% in just the last 10 years. If you think about this, it is really a very strong downward trend. While skiers are in fast retreat, snowboarders have been taking up some of the slack but not enough. Total “skier visits” (including snowboarders) has fallen by over two million visits since 1994. The 1985 Wasatch Cache Forest Plan is very clear that the expansion of capacity at ski resorts should be a function of current excess demand.

Response: Your statement is correct in that the national trend for annual skier visits appears to be stable or, in the past few years, downward. However, last year national totals were up substantially. Utah’s share of the national market has increased from 4.5% in the early 1980s to 5.5% in recent years. Therefore, while the national market may not be exhibiting growth, Utah has been able to increase its share about 20% showing that the demand in Utah is increasing. (State of Utah 1998). In response to this increase, the Forest Plan allows the expansion of capacity at appropriate resorts.

SO-EC-DC-19-2 The DEIS relies on a 1998 study of the Utah Ski industry by the Governor’s Office of Planning and Budget to justify expansion of Solitude. This study, using 1996 ski year and earlier data, is outdated and as time has already shown us its projections are very wrong, especially regarding Solitude. The study’s projection (Table 7) of skier visits for
Solitude (if they made no improvements) in 2000-2001 ski year was for 297,000 skier visits. The reality is that Solitude only had 186,700 skier visits; the study is off by 37%. Recognizing the error in the study, the DEIS tries to update it by shifting numbers by 4 years, assuming the rest of the world has not changed, but in reality things have changed a great deal! This shifting only compounds the error and any of the projected skier projections in the DEIS are highly suspect and should not be relied upon.

Response: See Response to Comment SO-EC-DC-396-1 and SO-EC-DC-35-1 for a discussion of the changed forecasting data used in the EIS. The comment that the forecast figures used in the DEIS are too high is correct. Rolling the forecast ahead is standard forecasting procedure in the public policy realm when actual values have varied substantially from forecast values for unaccountable reasons. Unless there is a logical reason to change the model, this procedure provides the best forecast possible under the circumstances.

In addition to rolling the forecast ahead, some of the assumptions behind the fluctuations occurring in the first few years of the model have also been adjusted. Therefore, a modest straight-line growth model has been used to forecast into the future. The updated projections forecast that under the Proposed Action skier visits would reach 247,000 skiers by the year 2010. These projections show a reasonable level of growth. It should also be noted that in 1995 skier visits reached 242,000. The purpose and need section in Chapter 1 of the EIS explains all the reasons for the proposed project, not just the accommodation of projected skier growth.

SO-EC-DC-208-1 If Solitude for example lowered its pass price to $5 less than Brighton, provided snowmade terrain features encouraging new school skiers and upgraded a couple of lifts to quads, they may find a surprising increase in skier numbers with no other development. Purpose and need based on skier numbers is faulty logic.

Response: One aspect of the purpose and need of the project is increasing skier numbers, but there are numerous other purposes of the project as outlined in Chapter 1 of the EIS. We do not regulate ski area ticket pricing. Ski area pricing is the responsibility of the permittee. The permittee considers a number of natural and market forces at work locally as well as nationally. It is often assumed that lower ticket prices would result in increased visitation. However, lowering the price of tickets would not address the overriding purpose and need of improving many aspects of the recreational experience. Local skiers have traditionally been able to purchase reduced price tickets through discount programs offered mainly for local recreationists.

Your recommendation that Solitude make certain infrastructure improvements to increase skier visits is consistent with assumptions outlined in the GOPB study. However, these improvements must be done in a manner that is balanced and improves the overall skier experience, as stated in the Purpose and Need for the project. Please also see Response to Comment PUR-DC-208-1.

RESORT COMPETITION

SO-EC-DC-63-2 The total number of skier days nationwide has not changed for decades, so resorts are competing against each other to capture a bigger piece of a stagnant market. Solitude may see a slight rise in skier numbers until another resort adds something bigger and better to lure the skiers back.
Response: See Response to Comment SO-EC-DC-19-1. Since 1992, Solitude’s market share has decreased consistently while the total skier visits for the state has increased. While the total number of skier days for the nation has been essentially unchanged over the past 15 years, the number of skier days in the market that Solitude competes for has continued to increase through time. Several other resorts in this market have seen their market share increase at rates faster than overall growth.

The purpose and need of Solitude’s proposal is to enhance the recreation experience for destination and local skier’s, as well as other year-round visitor’s, while being consistent with its approved village concept. Solitude is expected to see their market share increase as a result of the improvements outlined in the EIS. There has been and will continue to be shifting in market share as resorts compete for business and this is to be expected. While other resorts may continue to add amenities, Solitude’s purpose is to make the overall recreational experience complete. See also Response to Comments SO-EC-DC-19-1 and SO-EC-DC-63-1.

SO-EC-DC-33-1 In terms of satisfying customer demand we probably have more than enough terrain already developed for downhill skiing. The mega resort at the Canyons and the new Deer Crest development give Utah more capacity than skiers. The FS must take the position that they are not in business to allow resorts to compete with each other.

Response: See Response to Comment SO-EC-DC-63-2. Meeting skier demand is only one of the purposes of Solitude’s proposal. The proposal is designed to improve the quality of the overall skiing experience as well as enhance summer recreation opportunities in BCC through a number of upgrades and improvements. Our need for ski resorts on the WCNF is to provide a wide range of quality winter recreation opportunities. Solitude fulfills many of the objectives for winter recreation contained in the Forest Plan. Solitude has incorporated its own purposes and needs into its MDP to meet the overarching Forest Service purpose and need. As Solitude upgrades its infrastructure and services, it will likely maintain or improve its competitive position.

SO-EC-DC-190-1 Although this is great for Solitude’s economic scene, will it cause a shift in competition to the extent that other resorts will suffer? I think it will and I’m concerned that initially Solitude will properly manage the environment so that they will gain the approval of concerned people like myself and in the end will only concern themselves with increased profits.

Response: See Response to Comments SO-EC-DC-63-2 and SO-EC-DC-33-1. It is difficult to say that any other resort would unduly “suffer” due to increased visitation at Solitude. Section 4.4.5.2.3 of the EIS recognizes that there would be some shift in market share among resorts. Many factors are at work that would affect the economic success of the resorts. By industry standards, many of the resorts in Solitude’s competitive area enjoy visitation and higher utilization rates than other resorts, both nationally and in the Rocky Mountain region. Further, skiers are spending more money on a per-skier-visit basis than just a few years ago. As a result, some ski areas have seen a decrease in skier visits yet have maintained a healthy business.

To some extent Solitude, as with any other business, must concern itself with company profit in order to stay viable. Therefore, if the resort did not respond to the needs of its market, business would suffer.

Volume II – Response to Comments 3-64
Mitigation measures required in the Record of Decision and implemented through annual operating plans would ensure that impacts to the environment are minimized and kept within an acceptable range if the Proposed Action or an alternative were approved. Adherence to the terms and conditions of the special use permit will be required as long as it is in effect.

**URBANIZATION**

SO-EC-DC-94-1 Solitude expansion will further destroy the natural beauty of the canyons. Ice rinks, skating rinks, hotels and condominiums will only add to the commercialization and congestion of the canyons leading to destroying natural beauty and serenity and creating an artificial “Disneyland” like atmosphere.

**Response:** The existing condition of Solitude area is described in Chapter 3, Section 3.4.3 of the EIS with respect to the substantial recreational and commercial development currently in place. The construction of hotels and condominiums has already occurred in the Village area. The impact of proposed, additional development is analyzed under each of the alternatives in the EIS (Section 4.4.3).

The Proposed Action would add to the commercialization of the resort and to the perceived urbanization of BCC. The Village at Solitude development is located on private land and has previously been approved by Salt Lake County. The development of the Village and the continued development of first and second homes in BCC have increased the level of urbanization in BCC. Regardless of which alternative is selected, these developments will likely continue. These developments are, however, restrained by the county approval of the Village and the water rights acquired prior to the 1991 ordinance.

As indicated in Section 4.4.5.3.2 of the EIS, the base lands at Moonbeam and Eagle would see an increased level of development associated with the respective day lodges and the pulse gondola. Solitude is a developed recreation site and some level of facility development is within the expectation of most visitors to BCC.

SO-EC-DC-35-2 My final comment addresses the character of Big Cottonwood Canyon itself. Considering Solitude’s proposal in the context of development that is going on in Salt Lake City, Park City, Heber, and Midway, isn’t it reasonable to keep one canyon relatively unurbanized.

**Response:** Development is proposed at Solitude and is taking place at other resorts. Utilization at many of these areas is increasing partly due to additional amenities. While the character of much of the canyon would remain unchanged, some of the area associated with the resort itself would be modified.

Much of the area to be impacted is located on private land and falls under the jurisdiction of Salt Lake County. The disposition of much of the private land in BCC is out of the scope of Forest Service decision-making and is addressed in the EIS only in terms of cumulative effects (Section 4.4.3.4). Development of these lands would inherently increase urbanization of the area and potentially alter the character of portions of BCC for some visitors. See also Response to Comment SO-EC-DC-94-1.
SO-EC-DC-13-1 The Solitude proposal is extremely aggressive and will have far-reaching effects on Salt Lake County and all who use Big Cottonwood Canyon. Instead of hikers, family picnics, fishing, wildlife and sightseeing, visualize year-round traffic congestion, hot asphalt parking lots, noise, pollution, and loss of wildlife. Throw in additional taxes for road and sewer maintenance, public service personnel, and a huge increase in the use of our precious water. Changes such as these will be irreversible.

Response: All of the recreational activities referred to in this comment would continue to exist in BCC. Impacts to traffic, parking, noise, air quality, and wildlife are discussed in the EIS in Sections 4.4.2, 4.2.4, 4.2.3, and 4.3.3, respectively. Impacts on road maintenance and special service districts are addressed in Section 4.4.3. Impacts to water resources are included in Section 4.2.1.

SO-EC-DC-16-1 In reviewing the Appendices, one constantly finds the statement that the proposed amendment to the Forest’s long-term plan is “non-significant” because the area where the amendment will be valid is only in a small portion of the National Forest. However, we must keep in mind that the area discussed is being built/urbanized substantially. One only needs to look on the resort’s private land, specifically the upper parking area/now base village, to realize this. Any amendments made for further development at or near Solitude Mountain resort will be significant to the area of Wasatch-Cache National Forest because it is such a highly impacted area. The cumulative impacts, as we are always discussing in light of proposed projects, it seems, will be significant to this specific area.

Response: The Forest Service Handbook (FSH 1909.12, Chapter 5) provides guidance for determining the significance of Forest Plan amendments on the basis of: timing; location and size; goals, objectives, and outputs; and management prescriptions. These factors are to be addressed at the Forest level rather than for specific projects or areas. This level of analysis was incorporated into our determination that the proposed amendment would not be significant. See Appendix A, Proposed Forest Plan Amendments.

Impacts to the Solitude area are discussed in Chapter 4 of the EIS. Cumulative impacts are also disclosed in that same chapter and consider other impacts associated with the area of concern. See also Response to Comment PRO-DC-6-7. See also Response to Comment CUM-DC-16-1.

SAOT/CCC

SO-EC-DC-82-1 We understand the reason for two site capacity calculation methods, since we deal with the carrying capacity issue frequently. The discussion of capacity is convoluting the Draft. We admit that we don’t know the meaning of SOAT, constantly having to convert to CCC. May we suggest that the capacity calculation be simplified in the Final EIS.

Response: The source of confusion lies in the fact that different methodologies were used in the 1985 Forest Plan as compared to current ski resort planning techniques. We are bound to utilize the same methodology in the Forest Plan to identify SAOT even though it may not accurately reflect actual daily skier visits as identified as CCC in the EIS. Chapter 3 (Section 3.4.5.3) and Chapter 4 (Section 4.4.5.2) of the EIS explain the CCC calculation in detail.
SO-EC-DC-18-2 Even Alternative 4 permits the carrying capacity to increase by 31% and therefore, the risk of habitat destruction, loss of water quality, fires, and countless more related impacts also increase by 31%.

Response: Under Alternative 2, CCC would increase by 31% (4,090 to 5,370 skiers). Alternative 4 would increase by 22% (4,090 to 5,010 skiers). Depending on the resource discipline, an increase in carrying capacity at Solitude may or may not translate into a commensurate increase in impacts to other resources. Under Alternative 2, the annual skier visitation would be proposed to increase from 203,000 visitors to 247,000 visitors, an increase of 21.7% over a nine-year period. Impacts to wildlife habitat, water quality, and forest resources are disclosed in the EIS in Sections 4.3.3, 4.5.1, and 4.3.2, respectively.

GENERAL

SO-EC-DC-103-1 Recreational demands on use of the canyons have been recorded since the pioneer days and recreational pressure will continue in the future. It is obvious that a permit system for usage of the Cottonwood Canyons usage is imminent. Will the Ski Industry be grandfathered?

Response: Consideration of a permit system for access to BCC is beyond the scope of this analysis.

SO-EC-DC-107-1 The changes they are requesting, including, expansion of facilities, better (more) transportation options and new lifts, are desperately needed to stay competitive with other ski areas, and to really make Solitude Resort as good as it can be.

Response: Positive as well as negative impacts of the Proposed Action and alternatives are disclosed in the EIS.

SO-EC-DC-18-1 In effect, what are the costs and benefits to the public when a resort like Solitude opts to take more public land and transition into an all season facility?

Response: Section 4.4.3.3 in the EIS explains economic costs and benefits of each alternative. Other non-economic costs and benefits of the alternatives are disclosed in other resource disciplines of concern.

SO-EC-DC-183-1 We are skiers and hikers and spend much time in the area. To commercialize the beauty of the area is only in the interest of the developer to make money. Please consider the economics and impacts of what can happen if this expansion is not successful. Why is this necessary?

Response: The economic impacts of development are considered in Section 4.4.3 of the EIS. The EIS also discloses impacts to other resource disciplines in connection with this project. Mitigation measures have been identified that would reduce or eliminate the impacts of the proposed project. While many impacts may not be eliminated, they must be determined to be within acceptable limits. Those impacts not acceptable to the us would not be allowed through the Record of Decision. The Forest Service requires that all proposals submitted by permittees
be analyzed through the NEPA process in order to understand potential impacts and to reduce the potential of authorizing projects that would not be successful. See also Response to Comment PUR-DC-183-1.

SO-EC-DC-223-1 None of these "improvements" are necessary for people to enjoy the surroundings in Big Cottonwood Canyon. The success of Brighton Resort and Alta Ski area attests to the fact that such "amenities" are not the critical factor at work. Good management of the existing facilities with basic modernization seems to provide a better profit margin and customer satisfaction. The addition of the many frills Solitude is proposing will drastically raise the overhead but not necessarily attract enough paying customers to provide high profits... and at considerable cost to the canyon environment. Solitude does not seem to have a clear vision of what it takes to operate.

Response: Sections 1.3, 3.4.5.3, and 4.4.5.2.1 outline the rationale for making improvements at Solitude. The economic effects of Solitude's proposal are discussed in the EIS in Section 4.4.3.3 and the potential effects to the canyon environment are discussed for the various resource areas in Chapter 4. Solitude has identified in their Master Development Plan additional objectives of the improvements. During the decision making process, we will review information contained in the EIS including impacts, both positive and negative, and mitigation to determine the level of development appropriate on NFS lands. See also Response to Comment PUR-DC-223-1.

SO-EC-DC-24-1 It is only fair to allow Solitude to be more profitable but only if attaining that goal is not at the expense of the general public.

Response: Preparation of this analysis comes at the expense of the proponent. The analysis is completed objectively through the NEPA process and considers the concerns of agencies as well as the public. Impacts that are not necessarily monetary in nature are also considered through the NEPA process.

SO-EC-DC-24-2 Many of the proposed expansion plans would be severely damaging to the public land Solitude wishes to use.

Response: Potential impacts to public and private land resulting from implementation of the Proposed Action or an alternative are disclosed in Chapter 4 of the EIS.

SO-EC-DC-51-1 Another good reason to move improvements and expansion to the Moonbeam Center area is that even though Solitude expanded the Last Chance facility in 1995, there has been a decrease in skiers every year since then, while at other resorts in the area there were increases. In the DEIS, the increased number of skiers at neighboring resorts is attributed to improvements of their mountain base facilities. Since the Last Chance Mining Camp had just been completed, when the decrease in skiers at Solitude began (and has continued to the present time), there is no reason to expect that the further increase of facilities in this area would have any different or better results.

Response: We have decided to modify the alternatives to address this concern. Changes to Alternative 3 include the following: 1) all services moved from the Last Chance Mining Camp to Moonbeam Center and Eagle Express Day Lodge; and 2) eliminate the Pulse Gondola from the
alternative. The Last Chance Mining Camp under Alternative 4 would also be unchanged from the No Action Alternative. These changes have been incorporated into the EIS and will be considered in the decision making process. The effects of facility development on skier visitation are discussed in the EIS in Section 4.4.5.2.3.

SO-EC-DC-84-1 They [Solitude] have shown an acute awareness of the need to be respectful of the environment and the area surrounding the resort. Their economic future is tied to keeping Big Cottonwood Canyon beautiful and appealing to visitors and potential visitors alike.

Response: Thank you for your comment.

ADDITIONAL COMMENTS

SO-EC-DC-6-1 The DEIS suggests many factors that could account for the under-utilization of Solitude... These suggestions all imply that further developments would eliminate under-utilization.

There is, however, a far more significant and obvious factor that influences utilization. The DEIS (Appendix K-5) admits that the basic resource of a ski area is the skiable terrain... Skiers avoid terrain and snow conditions they find dull or unpleasant and seek terrain they find interesting and enjoyable. It may be that skiers find Solitude’s terrain to be less enjoyable than the higher altitude, more open and varied terrain they can find at Alta, Snowbird, and Brighton. No amount of development will affect this factor. Although this planning axiom is described in Appendix K, the DEIS fails to analyze the very real possibility that the proposed developments might not increase Solitude’s utilization at all.

Response: The historic use and our recreation analysis (Section 4.4.5) indicate no fundamental problems with Solitude’s location or endowment of the natural features necessary for a successful ski resort. The number of skier visits projected for Solitude has been changed based on adjustments made by the GOPB. These updated figures are located in the EIS (Section 4.4.5) and provide the basis for analysis of impacts. See also Response to Comments SO-EC-DC-190-1 and REC-DC-6-1.

SO-EC-DC-6-2 The DEIS states that the infrastructure investments made by Brighton directly resulted in increased skier visitation and utilization of the resort. It should be explicitly acknowledged that this implied link is not, and cannot be, rigorously substantiated. The DEIS implicitly acknowledges this, but continues to treat the growth of skier visitation at Brighton as a result of capital improvements... Solitude can only increase its patronage at the expense of Brighton and other ski areas.

Response: See Response to Comment SO-EC-DC-63-1.

SO-EC-DC-6-4 An increase in skiers at one resort results in a decrease in skiers at other areas. Thus, improvements at one resort will, if they are successful in drawing skiers, only cause competing resorts to further urbanize to maintain their competitiveness. There is no new demand for skiing opportunities. Instead, the demand observed is only for condominium and commercial
developments, urban amusement rides and facilities, all of which represent unacceptable uses of Forest Service land.

**Response:** See Response to Comments SO-EC-DC-63-1 and SO-EC-DC-19-1 with respect to competing resorts. The effects of skier demand are discussed in the EIS in Sections 4.4.5.2, Recreation, and 4.4.3.3, Socioeconomics. Activities on adjoining private land are controlled by Salt Lake County. The Record of Decision will determine what projects represent acceptable uses of NFS land. See also Section 3.4.5.3 in the EIS and Response to Comment REC-DC-6-14 for a discussion of skier demand, skier visitation, and market share trends.

SO-EC-DC-6-6 The "Utah Skier Visit Analysis" fails to give the scientific assumptions for its "feelings." Instead it was decided to use the long-term growth, going back more than 25 years, of destination skier days in Utah of 52,981 per year, or a growth rate of 2.9% per year for 1997. This is 4.75 times as fast as the predicted rate of growth for skier age population in the United States. In fact, the rate of growth of destination skiers has slowed remarkably in recent years in Utah. . . Given the fact that the number of skiers in the United States is declining, this means that Utah resorts will have to capture an increasing share of a shrinking market, a negative sum game. No analysis is given to substantiate Utah's ability to do this in the future.

**Response:** The analysis in the EIS has been changed to reflect skier visits that have been updated with respect to recent trends (see Section 4.4.5). See also Response to Comments SO-EC-DC-63-1 for a discussion of Utah skier visits as compared to national figures and SO-EC-DC-35-1 for a discussion of projected skier visits.

SO-EC-DC-6-7 The "Utah Skier Visit Analysis" projects local ski visits to increase based on past history but fails to take into account the decreasing preference for skiing and the increased demand for other activities.

**Response:** In projecting skier visits, it is essential that the history of skier visits be taken into account. The analysis in the EIS has been changed to take into account recent changes in skier visitation and changing skier preferences (see Section 4.4.5). See also Response to Comments SO-EC-DC-35-1 and SO-EC-DC-6-6.

SO-EC-DC-6-8 The Solitude DEIS attempts to use the skier numbers projected by the "Utah Skier Visit Analysis" by trying to update them by shifting them forward by four years (DEIS p.4-171 and DEIS Appendix K) and by assuming that all other factors have remained constant. . . The DEIS does not state whether or not any statisticians, economists or the GOPB were consulted before the GOPB numbers were shifted forward by four years. Changing in the labels on the projected years in the GOPB analysis does not update them; it invalidates them.

**Response:** See Response to Comments SO-EC-DC-396-1 and SO-EC-DC-19-2. Forecasted changes to skier visits for the EIS were made in coordination with the GOPB. The revised visitation estimates in Section 4.4.5 of the EIS utilized estimates generated by the State of Utah GOPB in the 1998 Utah Skier Visit Analysis.
The GOPB’s “No Action” estimates for Solitude are wrong by more than 100,000 skier visits in both years and completely invalidate the GOPB estimates in regard to Solitude.

A new study is needed of skier demand both for the State of Utah and for Solitude in particular. This study should be completed by a non-partisan source such as a university, rather than one subject to political pressure and/or political motivation, such as the Governor's Office of Planning and Budget.

Response: See Response to Comments SO-EC-DC-396-1 and SO-EC-DC-35-1. The skier visit analysis has been revised in the EIS (see Section 4.4.5). The projections used in the EIS are based on historical skier visits as well as assumptions regarding future skier visits. The U.S. Office of Management and Budget (OMB) and the U.S. Congressional Budget Office (CBO) set the standard for policy analysis in the federal government, and are a model for the practice of policy analysis in state agencies such as the GOPB. The practices of OMB and CBO set the standard during the preparation of the Utah Skier Visit Analysis. Sound forecasting techniques were incorporated in the Utah Skier Visit Analysis. We have determined that the study was completed in an objective manner and disagree that a new study is needed.

In the MDP Update Draft EIS it states that the proposed upgrades and modifications are needed to improve skier circulation and flow as well as balance utilization. I don’t see how moving and expanding everything to this area will accomplish this as effectively as providing and expanding services in a more accessible place. If the forest service wants to increase the opportunity for everyone of all ages, abilities, cultures, social & economic backgrounds to be able to enjoy the Solitude area, then the facilities should be where the access is. All the services for the Last Chance Mining Camp area would be better utilized and in some cases are needed most where the majority of the visitors arrive.

Response: Alternatives 3 and 4 have been modified in the EIS. These alternatives shift the functions proposed for the Last Chance Mining Camp to the Moonbeam base area. The analysis for these alternatives address the issue of whether visitors would be better accommodated by this change. See also Response to Comment SO-EC-DC-51-1.

Does the creation of facilities at Last Chance Mining Camp induce greater spending? It seems to me that people in the village will spend more on food, lodging and entertainment and a greater financial return would be derived from the development of those facilities within the village. The Moonbeam Center will be the center of spending money for ski tickets, ski schools, and mountain activities. That should be developed at the Moonbeam Center to increase returns, not diluted by moving part of the processes to another place.


K. TRAFFIC AND PARKING

MASS TRANSIT
TRAN-DC-150-1  I do not think any expansion should be allowed in Big Cottonwood Canyon (or little) until mass transportation is developed, preferably a train.

Response: See Response to Comment TRAN-DC-16-2. The mass transit and traffic effects of proposed ski area development are discussed for each alternative in Section 4.4.2 of the EIS.

TRAN-DC-16-1  While I realize that destination resort vacationers may not have the luxury of understanding the local infrastructure for alternative transportation and mass transit, I believe that Solitude’s promotion of this and a stronger partnership of the UTA would help alleviate parking concerns better than any added parking.

Response: Solitude, as well as all Cottonwood ski areas, currently supports the UTA and mass transit through offering season pass holders and employees free UTA ski passes, contributing to the purchase of new ski busses, and through past contributions toward the construction of park-n-ride lots at the base of both Cottonwood canyons. The effects of the proposed ski area developments on parking and mass transit use are discussed for each alternative in Sections 3.4.2 and 4.4.2.4.4 of the EIS.

TRAN-DC-16-2  The whole idea of light rail in BCC or LCC has never been explored. While it is not feasible for Solitude to pursue such a venture alone, it seems that the Cottonwood Canyons as well as the UTA would benefit from exploring the idea of expanding the light rail into the canyons. This would alleviate roads and localized pollution altogether. If a 40 year solution to the transportation problems of the Cottonwood Canyons is to be determined, then I ask that a study be done on the potential positive/negative impacts, energy savings, and pollution reduction that putting such a system in the canyons might have for both the short and long term.

Response: The idea of a light rail has been discussed; however, the terrain within the Canyons, including grade and hill-slope area, makes the concept nearly impossible to implement. Furthermore, it would be prohibitively costly with not much greater benefit than bus service. A Light Rail with the same headways and same amount of transit parking would not increase the amount of ridership on transit up the Canyon. As stated in Section 4.4.2.9 of the EIS, increased transit ridership will depend on expanding the park-and-ride parking near the mouth of the Canyon. Our recommendation would be to increase bus frequency and available parking for transit near the mouth of the Canyon. From a Transportation mitigation view, the Light Rail is no more beneficial than the bus service of the same frequency. Please also see Response to Comment ALT-DC-16-1.

TRAN-DC-206-1  Public transit – need it! The parking facility at the base of the canyon is woefully inadequate and needs to be expanded. Expansion could be paid for by a toll assessed to private vehicles entering the canyon (which would also encourage use of public transit).

Response: Section 4.4.2.9 of the EIS indicates that additional parking at the Canyon Mouth area is necessary to expand transit capture. A new park-and-ride at Wasatch Blvd / 6200 South is currently under construction to increase transit parking in the area. See also Response to Comment ALT-DC-206-1.
TRAN-DC-208-1 There should be a concerted effort by all responsible government agencies to relieve this problem and according to these same agencies the solution is mass transit. Rather than building new roads and new parking lots in the Solitude area which can only encourage more development and congestion, a real effort should be made to move the traffic out of the canyon.

Response: See Response to Comment TRAN-DC-16-1.

TRAN-DC-208-4 It is interesting that the shuttle between Brighton & Solitude is eliminated because not only is it a running shuttle, but Solitude Nordic also provides hourly shuttle bus service. How can an existing shuttle be eliminated from study? A simpler solution already in place at Alta is the rope tow. This concept could be improved on and is temporary viable alternative to all the other contrivances and should have been included as an alternative, hasn’t been eliminated from study and is unmentioned.

Response: As stated in Section 2.3.6 of the EIS, UTA already provides service to and between Brighton and Solitude, and in conjunction with the additional shuttle service currently provided by Solitude between its two base areas and the Nordic Center, the redundant service was viewed as unnecessary. The Sol-Bright trail provides a more convenient ski connection between the two ski areas of Solitude and Brighton. An enhanced ski connection would reduce the need for additional vehicles on an already congested highway. A rope tow lift, similar to the one used at Alta, would not be feasible in the Sol-Bright area due to the elevation gain of the lift. The tow at Alta moves skiers over flat ground. Rope tows are not appropriate for long sustained grades and would have similar impacts to chairlifts for construction and visual quality. See also Response to Comment ALT-DC-208-2.

TRAN-DC-24-1 Solitude doesn’t need more parking lots; it should be working to decrease the number of cars that clog up the canyon. Their plan should include detailed measures to improve mass transit. And if they feel they really do need additional parking, it should not be built on public land. If Solitude has enough property to build condominiums they must have enough to build parking lots to serve those condominiums.

Response: Solitude’s proposed action, as well as all other action alternatives analyzed in the EIS, proposes enhancements to mass transit. As stated in Section 4.4.2.9 of the EIS, new canyon mouth parking areas are needed to increase transit ridership. The effects of proposed parking expansion are discussed in Section 4.4.2.3.3 and 4.4.2.4.4 of the EIS. See also Response to Comment TRAN-DC-29-1.

TRAN-DC-41-1 We have found the Mass transit system in Utah to be far superior to what is offered at our California ski resorts! Maybe a little more can be done to improve the loading and unloading areas at Moonbeam Center. This might encourage people more to use mass transit systems. The addition of acceleration/deceleration lanes would help decrease a potentially dangerous accident area.

Response: The proposed Moonbeam Transit Center should improve on mountain transit operations. The effects of enhanced mass transit and acceleration and deceleration lanes are discussed for in Section 4.4.2.4.1 of the EIS.
CONGESTION

TRAN-DC-155-1 Upon the completion of the current phase of Solitude’s plan there will be 560 units available for rent. This will lead to increased traffic in Big Cottonwood Canyon which is already the most used of the Wasatch Canyons. From pollution and congestion viewpoint, increased traffic can have potentially negative effects on the safety of visitors as well as the quality of their experience in the canyon.

Response: The effects of Village development on traffic are discussed in Section 4.4.2.3.3 and 4.4.2.4.2 of the EIS.

TRAN-DC-169-1 This development remains within the site of already developed ground. It is an esthetically pleasing proposal. It helps limit development in more pristine areas, but concentrating development on ground already occupied. It helps reduce daily traffic up and down the canyons by providing places to stay on-site. And it provides a service that another location cannot, i.e., it is at the resort development where the people want to be.

Response: Thank you for your comments. See Response to Comment LU-DC-169-1.

TRAN-DC-219-1 That road cannot handle the traffic a full-scale resort would require, and there would be far less use by ordinary people as a result. Those of us who fight traffic on a daily basis in the valley are not likely to use the canyon if the same situation obtains.

Response: Thank you for your comments. The analysis does indicate that congestion does and will continue to be present during the peak periods. Table 4-42 in Section 4.4.2.9 of the EIS quantifies this increase in delay expected by alternative. The effects of proposed ski area development on traffic are discussed in Section 4.4.2.4.1, 4.4.2.4.2, and 4.4.2.9 of the EIS.

TRAN-DC-30-1 Listed in the DEIS, not only will the traffic increase by an estimated 1800-2000 cars but the delay to reach your destination (Solitude) will increase by an estimated 25 minutes from the mouth of the canyon. Considering it takes about 20 minutes to reach Solitude today, with the expansion it will take 45 minutes, possibly an hour if you are behind a bus. Highway 190 was built many years ago to accommodate about 1400 cars per hour. If you travel up Highway 190 to Brighton on a given Saturday, there is a long line of cars parading up the canyon. Allowing the expansion will only add to the problem. Some people say widen the road to accommodate more traffic. If you widen Highway 190, it will look like Provo canyon and the character and reason people travel up Big Cottonwood will be extinguished. Mass transit is being used at its capacity. The only way to keep the canyon experience one to remember is to stop the expansion of Solitude.

Response: The effects of proposed ski area development on traffic are discussed in Section 4.4.2.4.1, 4.4.2.4.2, and 4.4.2.9 of the EIS. See also Response to Comment TRAN-DC-219-1.

TRAN-DC-50-1 Night skiing might help reduce traffic congestion in the afternoon but it just adds to the rush hour traffic at night. Have you ever tried to make a left hand turn on to 7000 So. below Wasatch Boulevard from 3:30pm - 6:30pm? It's not easy!!
Response: See Response to Comment TRAN-DC-219-1.

TRAN-DC-73-1 Actually, the updated Master Development Plan will improve access to facilities and services on a year round bases, while helping reduce traffic by emphasizing the use of mass transit.

Response: Thank you for your comments.

PARKING

TRAN-DC-184-1 If they want more parking, have them build a tiered parking garage. I get so infuriated by the land that is wasted by parking lots. It might be cheaper to ruin acres and acres of land, but it is smarter to build tiered garages—it takes less land and offers more parking spaces.

Response: The effects of tiered parking lots are analyzed in the EIS as an aesthetic and visual impact, not specific to traffic. From a parking capacity aspect, surface or structure does not matter other than for snow clearance issues. Please also see Response to Comment ALT-DC-184-1.

TRAN-DC-208-2 One error on assessment is the statement that the Moonbeam is used by cross country & back country dispersed users for parking. The majority of dispersed recreation parking use is in the Village area and no effort has been made to replace this parking.

Response: Cross-country and backcountry dispersed use parking currently takes place at both the Village and Moonbeam parking lots. The Village area provides parking for Nordic track users as well as for backcountry skiers accessing dispersed areas north of BCC. The Moonbeam lot (western end) provides parking for Silver Fork residents and for backcountry skiers accessing Silver Fork Canyon. Parking in the Village is entirely on private land and it is expected that most Village area parking will be displaced by Village development. The effect of parking displacement is discussed in Section 4.4.2.4.4 of the EIS.

TRAN-DC-29-1 Parking capacity should not be re-located on to public land. Solitude chose to close its upper (east) parking lot so that it could be used for real estate development. Due to this voluntary withdrawal of parking capacity from private land, the Forest Service simply has no obligation or duty to accommodate Solitude's desire to replace the parking on to public land.

Response: A range of parking alternatives, including alternatives that do not permit relocation of parking from private to public lands, are analyzed in Section 2.4.7 of the EIS.

TRAN-DC-63-1 The 1985 Forest Plan "states that parking for ski resorts should be limited to the existing area and no expansion on NFS lands should occur except for the replacement of parking lost to implementing mass transit facilities." Solitude should be held to these guidelines. I also see no compelling reason for the large increase in parking acreage in the Proposed Action. Studies quoted in the DEIS said that parking lots are only about half full right now.
Response: Solitude’s purpose and need for expanded parking, as well as Forest Plan direction on parking are discussed in Sections 1.3, 1.6.1.1 part 5, and 2.4.1 of the EIS. See also Response to Comment TRAN-DC-29-1.

TRAN-DC-82-1 We have some comments about Parking and the Pulse Lift in Alternative 6: 1. By elimination of additional parking on Forest Service land (West end lot note in Alternative 2), Solitude is forced to cover half of their 4.7 acre Carrie Mill site with automobile. This may prove problematic for keeping the relaxed skier circulation at the Eagle Express congregation area, particularly if a West End lift were considered – We believe that 1) a small public parking lot is needed that connects the Eagle Express area by bridge (not by chair lift). B) a favorable skier and ADA accessible lot (100-150 vehicles) could also be designed between Last Run, Shady Lane and the Power line uphill of the moonbeam lot. Such smaller, user-friendly lots would be welcome, but are not proposed.

Response: These areas were considered for parking expansion and were eliminated from further consideration as discussed in the EIS in Section 2.3.3. A Moonbeam lot west access road/bridge was proposed as part of Solitude’s original (1995 MDP Update) proposal and was eliminated by Solitude as part of their Revision (3/2000) to the MDP. The proposed West End parking lot and access lift replaced that proposal and the lift access was designed to reduce potential impacts to the stream corridor and wetland and riparian communities. Please also see Response to Comment ALT-DC-82-1.

TRAN-DC-82-2 The pulse gondola lift (see one at the Canyons) is apparently needed to make remote parking work. It seems difficult however, to imagine how the lift will cross several tower spans over the Moonbeam parking lot, then pass in front of the Moonbeam center, then cross over the link lift. True, the lift would run empty most of the time, but it does not seem to fit very well. A) The west end lift can offer redundancy to Eagle Express, and provide an easy glide to the Last Chance Miner’s camp, more aesthetically. This lift would however displace at least half of the parking spaces now proposed at the Carrie Mill Site B) Dedication of a separate parking shuttle lane may offer more comprehensive transportation service than the pulse gondola lift.

Response: The pulse gondola connects the Solitude base areas without the need for polluting busses or additional roadways of asphalt. While continuously running shuttles up and down the Solitude frontage is an option, it does not move people as efficiently as the Gondola concept. Alternative 4 does propose an internal circulation plan. The effects of the proposed pulse gondola are discussed in Sections 2.4.2.2 and 4.4.5.2.3 of the EIS. See also Response to Comment REC-DC-82-2 for a response to recreation comments.

TRAN-DC-49-1 There is no parking available at Last Chance Mining Camp to accommodate those who use the facility.

Response: No day parking is planned at Last Chance Mining Camp. Instead, the EIS analyzes the effects of various alternative means of accessing the Last Chance Mining Camp including the pulse gondola, the west end lift (Eagle Base to Roundhouse), resort-wide shuttle service, and existing lift access under each alternative throughout Chapter 4 of the EIS.
TRAN-DC-54-1 Also, there is very little space for parking and circulation around the facility, so this creates a traffic and congestion problem.

**Response:** Internal circulation is discouraged at Solitude. This creates internal congestion, air pollution and makes it more dangerous for the pedestrians walking to and from their vehicle. The intent is for users to use other modes (walking, lifts, pulse gondola, transit) to travel around the Solitude area. See also Response to Comment TRAN-DC-49-1.

**ROAD BIKING**

TRAN-DC-195-1 As a cyclist who enjoys riding up this canyon a couple times a week, I would also like to add that the increased traffic and pollution will not be appreciated by those of us who prefer a less invasive use of the mountain. Already I limit my riding to weekday and Sunday mornings to avoid as much traffic as possible. Even at these times, however the traffic is constant. I fear an increase in traffic due to this expansion will only lead to congestion, frustration, speeding and accidents.

**Response:** The analysis indicates that congestion is and will continue to be present during the peak periods. See also Response to Comment TRAN-DC-102-1.

TRAN-DC-102-1 The increase is summer traffic would further degrade road biking in Big Cottonwood not mentioned in your DEIS. The relentless construction over the years has negatively impacted road biking in the canyon.

**Response:** Section 4.4.2.3.2 of the EIS quantifies the estimated increase in summer traffic along the highway as a result of the already approved expansion. Section 4.4.2.4.2 of the EIS shows the projected summer increase for the Proposed Action.

**EXPANSION TO FOUR SEASON USE**

TRAN-DC-206-2 Snowmaking – don’t need any more. Noisy, ugly; even though the water catchment may be on private land, the water that will be trapped is currently in the public domain (Big Cottonwood Watershed) and the potential for contamination along with increase treatment costs are associated with its use for snow-making activities. Also, if it extends the season, there is increased traffic.

**Response:** The anticipated effects of the proposed actions including expanded snowmaking on traffic are discussed in Section 4.4.2 of the EIS. See also Response to Comment WAT-DC-206-2 for a response to water concerns.

TRAN-DC-208-3 If the plan is to encourage mountain biking, fishing, rollerblading and an Alpine slide, the increased traffic in summer should also include analysis and encouragement of mass transit year round rather than only in winter. This is completely lacking in the document.

**Response:** The projected increase in vehicles as a result of the project does not by itself justify the specific need for bus service in the canyon. While the Canyon as a whole may benefit from transit service, UTA would have to initiate this service based on a feasibility study to determine...
the economic viability of such an operation. The winter program is subsidized by the canyon ski resorts and it is unlikely that these resorts would generate enough summer business to subsidize a summer operation.

GENERAL

TRAN-DC-16-3 The one unclear part that I found in Alternative 4 was the statement that "as an alternative to the Pulse Gondola, Solitude would develop an internal ground transportation system to move people around." No further description was given. However, since I strongly support alternative 4, I believe the DEIS would not be complete without elaborating on this further. I propose that electric vehicles be looked into in developing this transportation system.

Response: While it is correct that the DEIS did not specify this option, the expectation was that of an internal bus system. The specifics of the type of vehicles, electric or diesel, etc. were not specified. A mitigation measure that promotes use of alternative fuels to minimize air pollution has been added to the EIS in Section 2.6.1, 2.6.9 and in Appendix C. See also Response to Comment AIR-DC-164-1 for a related response. See also Response to Comment ALT-DC-16-3.

TRAN-DC-25-1 The last proposition the new lane for acceleration in and out of Solitude is needed. The exit of autos out of Solitude at the end of the day of skiing has always been a problem with the traffic coming down the mountain from Brighton. The proposed new lane would make that intersection safer.

Response: The effects of acceleration and deceleration lanes are discussed in Section 4.4.2.4.4 of the EIS.

TRAN-DC-254-1 What is C14 on Figure S-4 in the DEIS Summary?

Response: C14 refers to the Bus/High Occupancy Vehicle Parking Lot proposed project.

TRAN-DC-42-1 The activity at the Last Chance is already a tremendous problem and needs to be diminished, not increased! There is already too little parking, too much noise, and congestion.

Response: See Response to Comments TRAN-DC-49-1 and TRAN-DC-54-1.

TRAN-DC-11-1 I believe, in fact, that the improvements will make the road safer because of the requested road access and will greatly relieve congestion.

Response: Thank you for your comment. See Response to Comment TRAN-DC-25-1.
violates the 1989 Salt Lake County Wasatch Canyons Master Plan. The plan states that additional parking lots are not allowed at the ski areas on private lands unless they contribute to solving transportation problems.

Response: The potential effects of parking expansion and Forest Plan/Salt Lake Plan consistency are discussed in Section 1.6.1.1-5 and 1.6.3 and in Chapter 4 of the EIS. According, increased parking capacity beyond current levels on either NFS lands or private lands beyond that used exclusively for mass transit (in the case of public lands) or that which contributes to solving transportation problems and improving the physical environment (in the case of private lands) would require amendments to appropriate Forest Service or Salt Lake County master Plans. See Section 4.2.1.1 of the EIS for discussions under each alternative for potential effects to water quality. See also Response to Comments TRAN-DC-29-1 and TRAN-DC-63-1. See also Response to Comment WAT-DC-1-2.

TRAN-DC-4-1 Because Big Cottonwood Creek is a protected source for drinking water, we are concerned with any proposal to increased impervious surface acreage with parking lots because of the well established link between impervious surface and adverse impacts to water quality. . . EPA therefore does not support amending the Wasatch-Cache Land and Resource Management Plan to allow parking on public lands because there is an adequate alternative by adding capacity to the Moonbeam Lot and there is additional (and avoidable) impacts from the permitting parking lots on public lands.

Response: See Response to Comment TRAN-DC-1-1.

TRAN-DC-5-1 The WCMP [Wasatch Canyons Master Plan] states that “Additional parking lots are not allowed at ski areas on private lands unless they contribute to solving transportation problems and improve the physical environment.”

Response: See Response to Comment TRAN-DC-1-1.

TRAN-DC-5-2 Alternative 5 and 6 seem to be most in compliance with the intent of the FCOZ [Foothills and Canyons Overlay Zone] ordinance. Providing for tiered parking in areas where parking already exists and/or which are screened from view from SR-190 is preferable to new parking lots which would be highly visible and impact property which is currently relatively undisturbed.

Response: The potential effects of parking expansion are discussed in Section 4.4.1 of the EIS. See also Response to Comment VIS-DC-5-1.

TRAN-DC-5-3 Although the WCMP is supportive of mass transit solutions the plan specifically does not allow expansion of parking on private property. It also assumes that the Forest Service Boundaries will remain the same. This would be an ‘additional parking lot’ and would require expansion beyond the existing Forest Service permit boundaries.

Response: Forest Plan and WCMP direction regarding parking and boundary expansion are discussed in Sections 1.6.1 and 1.6.3, respectively. See Response to Comment TRAN-DC-1-1. See also Response to Comment LU-DC-5-4.
TRAN-DC-5-4  West End Parking Lot: This would also be an ‘additional parking lot’ and would require expansion beyond the existing Forest Service permit boundaries.

Response: See Response to Comment TRAN-DC-5-3. See also Response to Comment LU-DC-5-5.

TRAN-DC-5-5  “Highway improvements should be within existing rights of way; for general maintenance and public safety considerations, not for increasing traffic volume capacities.” (p. 49 [WCMP])

Response: The addition of acceleration and/or deceleration lanes is primarily to provide a safer operation allowing merging and exiting of the traffic stream. The result is a reduced delay for traffic accessing the highway from the parking areas. The proposed highway improvements would be located within the existing right-of-way. See also Response to Comment TRAN-DC-25-1.

TRAN-DC-5-6  Measures should be implemented to discourage private automobile use and to encourage use of mass transit in the short term [WCMP].

Response: Thank you for your comments.

TRAN-DC-5-7  The FCOZ ordinance does not specifically prohibit the use of RV Hookups however this use as proposed at an existing Ski Resort seems out of place and not necessary due to the large amount of short term housing being provided by the resort and the close proximity to ‘camping’ areas in the canyon. It seems counter-productive to allot space to RV’s when parking for the resort activities is at a premium and an expansion of parking areas is being requested.

Response: The potential effects of RV parking are discussed in Section 4.4.2.3.4 in the EIS. See also Response to Comment REC-DC-5-3.

TRAN-DC-6-1  The DEIS makes the assumption that it is acceptable public policy to accommodate a real estate developer’s goal of shifting existing ski area parking capacity currently (and for at least the last thirty years) located on private land to public land. Nowhere in the DEIS is this critical issue posed or analyzed. . . The DEIS also fails to analyze the legal framework and assumptions underlying the supposition that it is proper public policy to allow a real estate developer to move parking lots from private land to public land.

Response: The EIS analyzes and discloses the effects of a wide range of parking alternatives. The EIS discloses the relationships and potential inconsistencies with the Forest Plan as well as with the Salt Lake County Wasatch Canyons Master Plan. It is discussed in the EIS that Forest and/or County master plan amendments would be required under some of the action alternatives. The EIS also discloses the potential effects of relocating parking on the biological, physical and human environments. The decision as to whether it is acceptable public policy to shift parking from private to public land to accommodate real estate development will be made in the Record of Decision. See also Response to Comments TRAN-DC-1-1, TRAN-DC-29-1 and TRAN-DC-63-1. See also Response to Comment LU-DC-6-2.
TRAN-DC-6-2 The parking plans of Alternative 2 are obviously far in excess of what is required under this most optimistic skier visitation growth projection.

Response: See Response to Comment TRAN-DC-63-1.

TRAN-DC-6-3 The DEIS omits any solid study on noise pollution caused by traffic, the impact of increased traffic on wildlife, and future projections of traffic in Big Cottonwood Canyon that will result from population growth.

Response: The traffic growth in the Canyon due to population growth is considered in the background traffic growth. Under the No Action Alternative, growth due to skiers and Canyon residents is estimated to increase per year by 3.77% if No Action is taken at the ski area (Section 4.4.2.3.1 of the EIS). In all subsequent alternatives, this based assumption is included and the additional impact of the alternative is added to this base condition. See also Response to Comments NOI-DC-6-1 and WL-DC-6-11.

TRAN-DC-6-4 The study summarized in the DEIS on present noise levels states that noise tends to be higher during the summer than during the winter... No measurements of noise levels are presented and levels are only discussed in terms of "greatest" or "more evenly distributed." While claiming higher noise levels in the summer, this study only focuses on traffic during the summer season in order to compare it with winter traffic. This focus is incomplete, as the study should be using this base data in order to project the increase in traffic noise arising from the expansion of the resort to "full season" use.

Response: As discussed in the Section 4.2.4 of the EIS, ambient noise levels are not expected to increase beyond those occurring today, regardless of the alternative selected. However, the duration of higher noise levels would likely increase as a result of increased construction, snowmaking, traffic, new lifts and grooming equipment. It is not expected that the increased duration of noise would be perceptible to the casual observer, although certain alternatives would create noticeable increases in noise for some near resort residents. See also Response to Comment NOI-DC-6-3.

TRAN-DC-6-5 Some of the information on traffic congestion offered in the DEIS is contradictory... Data collected from the 1989/90 through the 1998/99 winter seasons indicates that the 1998/99 "peak hours are consistently higher than the 1988/89 peak hours by an average of 15% over 10 years." This latter study concentrates on the winter months. The busiest days are more likely to occur in the summer," although traffic is spread out more during the day, alleviating congestion (p. 3-63). Like noise, traffic studies must not concentrate only on winter months, due to the facts that Solitude aspires to become an all-season resort, and construction will be conducted almost entirely during the summer months.

Response: Section 3.4.2 of the EIS includes considerable detail on the summer traffic. Furthermore, Section 4.4.2.3.2 of the EIS discusses the impact of summer traffic on road "level of service" as a result of the Solitude developments. Section 4.4.2.4.2 of the EIS expands on the summer analysis. The summer traffic is considered by the analysis but the emphasis is placed on winter traffic because of the highly congested nature of the highway in the winter. Also the
proposed improvements at Solitude are likely to have more of an impact on traffic congestion during the winter than summer periods.

TRAN-DC-6-6 The LOS (level of service) study rates congestion in Big Cottonwood Canyon on a scale from A to F. The DEIS fails to tell us whether these ratings are based on rural or urban congestion standards... The DEIS makes a confusing statement in an attempt to justify these ratings. It explains that "this is expected as the LOS E range for mountainous conditions is large when related to the volume to capacity ratio" (p. 3-64). This statement must be clarified, since it is explained earlier that LOS is based on volume to capacity. In addition, LOS ratings in the summer appear to indicate higher congestion in 1999 than in 1995.

Response: The LOS is a function of the volume to the capacity. Urban or rural conditions are irrelevant but grade does factor into the relationship. The mountainous terrain indicates that congestion has a wider range of values. Based on the mountainous terrain of SR 190, a LOS E condition exists for the volume to capacity ratio range of 0.37 to 0.80. Volumes between 552 and 1194 represent a LOS E. LOS is discussed in detail in Section 3.4.2.1 of the EIS. It is true that the summer 1999 condition does indicate higher congestion as stated in Section 3.4.2.1 of the EIS. The EIS has been updated to reflect the influence of mountainous terrain on LOS.

TRAN-DC-6-7 This DEIS leaves no doubt that traffic congestion in the canyon has already reached its limits... Increased vehicle traffic resulting from the proposed Solitude MDP cannot be supported by the existing roadway which, as the DEIS admits, already operates on some days at LOS F.

Response: The effects of traffic congestion and LOS are discussed in Section 4.4.2.1 of the EIS.

TRAN-DC-6-8 Mitigation measures suggest that Solitude will “encourage continued financial support to Utah Transit Authority to promote continued and increased use of mass transit by the public” (p. 2-83). In addition, Solitude “will promote the expansion of the park-and-ride system at the mouth of Big Cottonwood Canyon.” What does this mean? Does it mean that Solitude will buy land for this park-and-ride? Or does it mean that the resort will simply continue to pay for bus passes for resort employees and season pass holders? Solitude presently provides very few season bus passes and those without passes are not presently reimbursed for their bus tickets. But the report mentions consideration of a “wide range of incentives to encourage people to use mass transit” (p. 2-84). This does not coincide with Solitude’s request for an expansion of its parking facilities, which most definitely can be positively correlated with incentives to expand traffic. Therefore, Solitude should be required to provide specific examples of how they will provide incentives for the use of mass transit.

Response: Solitude, as well as all Cottonwood Canyon ski resorts, voluntarily provides financial support to UTA to promote mass transit. You are correct in your understanding of mitigation measures that encourage mass transit. It is in Solitude’s best interest to promote and support mass transit to support their operation. Solitude’s need to maintain and grow their skier base provides a greater incentive for increased mass transit use than any mitigation measure. Solitude, as well as any other ski resort, will have to continually measure the gains of their mass transit investments versus the results. Large capital investments in property for additional park-and-ride lots or additional busses require careful financial planning and projection. The effects of
expansion of parking are discussed under various alternatives in Section 4.4.2.4.4 in the EIS. See also Response to Comments TRAN-DC-1-1, TRAN-DC-29-1, and TRAN-DC-63-1.

TRAN-DC-6-9  The DEIS fails to offer a clear plan as to how and when the park-and-ride at the base of Big Cottonwood Canyon will be expanded.

**Response:** Expansion of the park-n-ride lot at the base of BCC, located on private land, would require Salt Lake County approval. Any proposal to expand the existing lot would be subject to Salt Lake County planning and zoning processes and is outside the jurisdiction of the Forest Service. The mitigation measure in the EIS has been revised to acknowledge this by stating “Explore the possibility of expanding the park-n-ride system at the mouth of BCC” (Section 2.6.9). See also Response to Comment TRAN-DC-6-8.

TRAN-DC-6-10  Traffic projections in Big Cottonwood Canyon must include projections of the increase in population along the Wasatch Front, and the increase in the numbers of residents in the canyon.

**Response:** These have been included in the analysis in Section 4.4.2.1.1. See also Response to Comment TRAN-DC-6-3.

TRAN-DC-6-11  Solitude should be required to develop mitigation measures to address the traffic congestion issues. These measures should include requirements to enlarge the park-and-ride lots and to offer bus passes with ski pass packages and any other actions that can help ameliorate the traffic congestion in Big Cottonwood Canyon.

**Response:** See Response to Comments TRAN-DC-6-8 and TRAN-DC-6-9.

TRAN-DC-6-12  Any change in SR190 should not serve to increase the speed of vehicles ascending or descending Big Cottonwood Canyon, nor should any road improvements serve to further urbanize the area. . . Widening the road to accommodate the acceleration/deceleration lanes will further degrade the natural setting of upper Big Cottonwood Canyon.

**Response:** The acceleration and deceleration lanes are to provide for a more safe merging of vehicles and reduced congestion at the accesses to Solitude. See also Response to Comments TRAN-DC-5-5 and TRAN-DC-25-1.

TRAN-DC-27-1  The parking data used in the Draft EIS is not fully understood. There are a number of unusual conditions at Solitude not found at the other three Salt Lake Ranger District ski areas. The EA Decision Notice of August 1988 approved three skier service buildings in the general location east of Last Chance Mining Camp. At that time and existing today there continues to be a shortfall of skier service facilities using Forest Service and industry planning standards even with the requested additions to existing facilities in this DEIS. Solitude, as is noted in the DEIS, deliberately planned to share facilities in the Village (parking lot) such that they would not need duplication on NFS land. We, also, created greenbelt areas in the Village to break up what otherwise is a ugly-looking parking lot. There are specific non-Solitude property owner road accesses which take up parking capacity such as Giles Flat, in the Village lot and upper Silverfornk road in the lower parking lot. When the Moonbeam Center was built in 1990, it
was sited partially on the existing Moonbeam Center lot with drop-off/pick-up area in front along with a fire safety lane. No parking capacity reduction was indicated when approved by US Forest Service. We are the only ski area within this Forest Service district that has a full service Nordic center with entrances both at Solitude Nordic Center facility at Brighton and at Solitude Village. We have not discriminated between a Nordic skier and an Alpine skier parking up to this point.

Response: Non-skier parking in Solitude parking facilities is discussed in Sections 2.4.1.4 and 2.4.2.4 of the EIS. The potential effects of non-skier parking are discussed in the EIS in the Chapter 4 recreation analysis and in Appendix H.

TRAN-DC-27-2  Encouragement for mass transportation appears lacking. We have encouraged mass transit usage by providing accessible and convenient drop-off and pick-up circulation areas at Moonbeam Center and Eagle Express where the public can take the best advantage of their easy and convenient use. Needed bus parking has been provided for.

Response: Thank you for your comments.

TRAN-DC-27-3 Solitude, also, deliberately planned to share commercial parking requirements between night commercial and day-skier requirements, i.e., incorporate within the Village those skier service function requirements not accommodated in Moonbeam Center and Last Chance Mining Camp facilities.

Response: Thank you for your comments.

TRAN-DC-27-4 Salt Lake County's approval of Solitude's master plan, as to the north end of Village, has two parking lots totaling 1.08 acres. These two lots satisfy Salt Lake County commercial code requirements (i.e., restaurants, grocery and other short-term). It was Solitude's intent to build Lot A first (actually completed 10/2000) and Lot B later. For this purpose, however, both lots (even though one does not exist yet) are included in Alpine Skier Parking. From a practical standpoint, their applicability to skier parking is yet to be determined.

Response: Your comment is noted. Our treatment of these lots is discussed in Section 2.4.1.4 of the EIS. The effects of parking relocation on alpine skiers are discussed in the EIS in the Chapter 4 recreation analyses.

TRAN-DC-27-5 Original Moonbeam parking lot was modified to incorporate agency requirements/comments on improvements to the lot by (1) straightening north side to provide efficient linear-row parking, (2) extend and accommodate the east end onto Solitude private property, (3) provide for convenient auto and mass transit drop-off/pick-up area adjacent to Moonbeam Center and at Eagle Express building, and (4) improve Eagle Express and Silverfork road access. These land areas have been impacted and disturbed and not all of it is effective parking.

Response: The potential effects of parking relocation are in Section 4.4.2.3.3 and 4.4.2.4.4 of the EIS.
TRAN-DC-27-6 Alternative 6 refers to a second tier parking on private land. It currently is uneconomical to build and, secondly, certainly not timely. It is a Forest Service decision? We do acknowledge its feasibility and the US Forest Service support for the concept. The parking acreage shown on Alternative 6, therefore is overstated.

Response: The potential effects of tiered parking are discussed in the EIS in the Chapter 4 socio-economic section. We do not have the authority to either require or authorize structures on private land. Salt Lake County would be required to authorize any parking relocation or expansion on private land. We are required by NEPA to evaluate a wide range of alternatives that address the issues raised during the scoping process. Alternative 6 was designed to address the integration of many issues, including parking. This alternative is a reasonable action to address the issues that shaped the alternative.

TRAN-DC-27-7 It is important to note Solitude’s installed digital RF ticketing system which provides Solitude (and only use to date) the ability to offer non-peak hour/day skiing capability thus encouraging off-peak hour traffic patterns (flex ticketing) which we are further encouraging through convenient parking in the bus, high-occupancy and other parking area.

Response: The effects of off-peak transportation and expanded parking are discussed in the EIS in Section 4.4.2.3.3 and 4.4.2.4.4.

TRAN-DC-27-8 With Alternative 2, Solitude’s vehicle parking to comfortable carrying capacity ratio still remains less than that approved for both Snowbird and Alta.

Solitude’s parking under Alternative 2 of projects C15, C14, and F2 is equal to our existing parking with adjustments noted above for (1) cross-country, (2) mass transit drop-off/pick-up and circulation areas at Moonbeam Center and Eagle Express, (3) bus parking, (4) existing Moonbeam Center Building, fire lanes and drop-off/pick-up area, and (5) access roads for upper Silverfork community and Giles Flat, adjustments consistent with Forest Service and County planning, including code, intent. As important, it is consistent with and supports Solitude’s comfortable carrying capacity.

Response: The potential effects of parking on the comfortable carrying capacity are discussed in the EIS in Section 4.4.5 and in Appendix H.

L. UTILITIES

UTIL-DC-45-1 One last item is the RV hookups in the Moonbeam parking lot. RV hookups should only be allowed in designated Forest Service Campgrounds. Somehow I believe these RV hookups would become employee housing tenements or migrant construction workers camps. Please drop these hookups from consideration.

Response: As detailed in EIS Section 2.4.1.4, under Alternative 1, Solitude proposes to develop 10 R.V. spaces in conjunction with relocating parking areas on private land on the west end of the Moonbeam lot. Salt Lake County, rather than the Forest Service, would have approval authority for this project. While projects entirely on private land are outside Forest Service jurisdiction, they have been evaluated in the EIS as connected actions and for cumulative effects.
Alternative 4 was developed to address concerns of increased urbanization in Big Cottonwood Canyon, and indicates that creation of R.V. hookups would not be consistent with this objective (EIS Section 2.4.4.4). Designation of appropriate locations for R.V. facilities is outside the scope of this EIS.

UTIL-DC-1-1 The DEIS proposes to construct a 10 unit RV trailer park. Salt Lake City opposes camping outside of designated camping facilities by ordinance. This facility would have to be designated for overnight camping with the agreement of the Forest Service and Public Utilities. This is a departure from normal procedures since overnight camping has been strictly a summer activity to date. The establishment of an RV dump station on this property has to be carefully reviewed for potential impacts to the sewer main. Illegal dumping could have significant impact to the canyon and without continuous surveillance would be a problem.

Response: Please see Response to Comment UTIL-DC-45-1.

UTIL-DC-223-1 Specifically, the Resort ought not to be able to expand any more onto public lands nor to enlarge its parking area to allow more vehicle space (or RVs!). The choice was made to exploit the private land of the upper parking area for cash flow by selling out to Intrawest. The rules should not be changed to accommodate the latest metamorphosis of the Resort's grand development plan. Rather than placing such a necessity as the fire station (long overdue) on public land, a suitable site adjacent to the highway should be provided, even if on valuable private land, to expedite the services it will provide to the community. Why should such an important public service be located 1/4 mile from the highway, where unpredictable levels of snowfall, parking lot traffic, pedestrians, a narrow causeway and a 32,000-gallon propane tank intervene in the access of public safety equipment to the road?

Response: In the decision-making process, we intend to evaluate the appropriateness of all actions proposed by Solitude under Alternative 2, including the extent to which upgrades and expansions are needed. Also, please see Response to Comment LU-DC-223-1 regarding fire station siting.

UTIL-DC-1-2 The development of a sewer lift station to accommodate easy access to the sewer line is unacceptable. The installation of a lift station increases the potential for sewage spills and backups. An extended pipeline to accommodate flow without a lift station is the recommended resolution to this issue.

Response: As stated in Chapter 2, Section 2.4.1.8 of the EIS, the State of Utah requires that all buildings within 300 feet of the Solitude Improvement District sewer line be connected to the system. Under Alternatives 1 and 2, Solitude proposes construction of a new Eagle Express Base Lodge (EIS Section 2.4.1.1 and Section 2.4.2.1). A pump station would be required as gravity flow of wastewater is not feasible from this location. The new Eagle Express Base Lodge would be located entirely on private land, therefore, the Forest Service has no approval authority for this project.

UTIL-DC-6-1 Beyond the question of whether night lighting is even necessary or desirable for Big Cottonwood Canyon is the issue of the current energy crisis in the West. Ski resort activities use large amounts of energy. What will be the impact of approving increased
energy intensive facilities in the canyon when compared to the expected energy availability and pricing? This issue should be addressed and analyzed in the DEIS by the Forest Service.

Response: Utah Power and Light provides service to Solitude and has stated that available electricity is sufficient to meet the needs of any of the alternatives evaluated in the EIS. Please also see Response to Comment REC-DC-6-4.

M. VEGETATION

FOREST THINNING

VEG-DC-18-1 Forest thinning – No forest thinning is appropriate unless it can be shown to enhance ecosystem productivity. Snags and multi-aged trees of varying densities and species are favored habitat for owls and goshawks and they support greater biodiversity.

Response: The resort’s Vegetation Management Plan (Long 1998) was developed to address the risk resulting from overcrowding and competitive stress and to improve forest health. The plan’s management direction for each management area is designed to address these issues. Thinning has been recommended for several management areas where high tree densities place the stand at risk for insect or disease outbreaks. Generally, snags will not be removed unless they pose a safety threat because of the habitat value they provide for many wildlife species (see mitigation measure WLF-3, Section 2.6.14 of the EIS. See also Response to Comment VEG-DC-50-1.

VEG-DC-50-1 As far as the vegetation plan, I believe that if thinning is allowed in certain areas it will prevent certain types of species from ever being able to exist in our mountains. It is the Forest Service responsibility to maintain & keep the old dense forests for the various types of wildlife that need them.

Response: Generally, the forest is managed so that vegetation cover types will form a mosaic of plant communities representing a diverse mix of ages, sizes, and species. While the land within ski area permit boundaries is managed with a primary emphasis on developed winter recreation while providing complementary summer recreation opportunities a primary objective, and the one addressed by Solitude’s Vegetation Management Plan (Long 1998), is to maintain a healthy forest and reduce the risk of disease or insect outbreaks. To achieve these goals, Solitude has developed a vegetation management plan that accommodates recreation while maintaining the health and vigor of native shrubs and trees. See also Response to Comment VEG-DC-18-1.

VEG-DC-96-1 Now, this resort wants to expand again, clear-cutting hundreds more acres of prime woodlands to increase this commercial sprawl in all directions, including up the canyon toward Brighton.

Response: The proposed expansion at Solitude would impact forested habitats. However, as disclosed in the EIS, the acreage of impacts to forested communities would range between approximately 3.1 acres under Alternative 4 and 22.7 acres under Alternative 2. Clear cutting large tracts of forest is not part of the proposal. Refer to Section 4.3.2.1 of the EIS for further discussion of impacts to forest vegetation. See also Response to Comment LU-DC-96-1.
PLANT SURVEY

VEG-DC-167-1 There are also fifteen species of wildflowers which have been identified up to today, July 5th, many more certainly exist in the Silver Lake Area. After research, I have learned many of these plants are critical forage for Mule Deer, Moose, Ground Squirrels, and Grouse.

Response: Lists of plant and animal species that occur or could occur at Solitude are found in Appendix G of the EIS. The potential impact to vegetation associated with each alternative is disclosed in Section 4.3.2 of the EIS. The effect these impacts would have on the wildlife of the area is disclosed in Section 4.3.3 of the EIS.

VEG-DC-19-2 A comprehensive survey and analysis of impacts on all wildlife and plants at Solitude is needed before any expansion plans are approved. The surveys outlined in the DEIS are limited in scope and do not even cover all sensitive plants and animals. For example, event though there are sensitive bats, shrews, snakes and pika in the area, no survey was undertaken of these species. The plant survey by Intermountain Ecosystems only included 16 species of plants and did not cover the high ridgelines in Honeycomb Comb or else they surely would have found *Lesquerella utahensis* and *L. garrettii* within the Solitude boundaries as I have. In addition, the sensitive species *Draba densifolia* was not even in the Intermountain Ecosystems survey. After a comprehensive survey and analysis of all species at Solitude is performed, a follow up system of monitoring needs to be put in place to ensure the long-term viability of all species at Solitude.

Response: The rare plant survey in the Solitude area by Intermountain Ecosystems (2000) was a directed survey designed to address those areas with potential habitats for special status plants that would be disturbed as a result of the proposed development. Some additional areas near potential disturbance sites that appeared to offer suitable habitat were also surveyed. However, the survey was never intended to provide comprehensive coverage of the entire permit area. The high ridge line in Honeycomb Canyon would be unaffected by the proposed development, and consequently was not surveyed. Focusing on those areas that might be impacted by the proposed development provides the information necessary to complete the impact assessment required by NEPA.

Dr. Ron Kass, who has 25 years experience with the flora of the area, completed the rare plant survey at Solitude. Although Table 1 in the Special Status Plant Species Inventory, Solitude Resort report (Intermountain Ecosystems 2000) listed 16 species that were specifically targeted in the survey, the survey was not limited to only those species. Additional species of botanical interest, including *Draba densifolia* var. *apiculata*, were also the subject of the survey, as Dr. Kass is familiar with all species of botanical interest in the project area.

Establishing a monitoring program of all species at Solitude would not be warranted given the anticipated level of impact associated with this project. Please refer to Response to Comment WL-DC-19-2 for a discussion of wildlife surveys.

VEG-DC-6-2 The survey and analysis of rare and sensitive plant species presented in the DEIS are much better than those that have been presented in other recent environmental impact
statements at Utah resorts. Dr. Ronald Kass, a botanist from Intermountain Ecosystems, conducted the field survey. His name and qualifications should be listed in Section 5-2 along with the other consultants.

**Response:** Dr. Kass has been added to Section 5-2 in the EIS.

VEG-DC-6-3 If Kass has spent some time at the Garrett Herbarium and consulted with the Natural Heritage Program, he may have had more details that might have resulted in finding more rare plants in his survey.

**Response:** Kass has spent many years working in herbariums and has studied rare plants in their natural environments. Because Dr. Kass surveyed all the areas where potential impacts would occur, spending time in the Garrett Herbarium would not have affected the results of the surveys.

VEG-DC-6-4 Another shortcoming of his survey is that it took place over only three consecutive days. Many of the rare species may not have been apparent at this specific time. The plant survey should have taken place periodically over the summer rather than on three consecutive days.

**Response:** Based on the professional judgement of Dr. Kass, and given the growing conditions that were present during summer of 2000, the three-day period over which the surveys were conducted was sufficient to determine if the species of concern were present.

VEG-DC-6-5 Kass did make some strong recommendations regarding the rare species he did find, which were not reported in the DEIS. For *Aster kingii var. kingii*, *Erigeron arenarioides* and *Jamesia americana var. macrocalyx*, he made the recommendation that: “All efforts should be made to avoid any construction or recreational activity associated with this specialized habitat.” This recommendation was not reported in the DEIS but certainly should have been.

**Response:** The intent of these recommendations was incorporated into the Section 4.3.2.3 of the EIS, where it states that the extent of these populations should be precisely mapped and the alignment of the proposed elements altered, if necessary, to avoid potential impacts to these populations. Further, mitigation measure VEG-11 (Section 2.6.11) also requires Solitude to identify the extent of these populations and modify the proposed elements, as necessary, to avoid impacts.

VEG-DC-6-6 The DEIS (pp. 3-29 to 3-33) lists forty-two “Special Status Plant Species” and their “Habitat Requirements” and the “Probability of Occurrence” at Solitude and the survey results from the plant survey performed in July, 2000 by Intermountain Ecosystems. However, in reviewing the report submitted by Intermountain Ecosystems on September 29, 2000, there are many discrepancies between it and the information presented in the DEIS. First, the Intermountain Ecosystems report only lists sixteen species that it surveyed for, not forty-two.

**Response:** Although the survey report specifically listed only 16 species, the survey included all species of botanical interest that could be present in the area. See Response to Comment VEG-DC-19-2 for further discussion of this issue.
Three species not surveyed for by Intermountain Ecosystems – the rockcress draba (*Draba densifolia var. apiculata*), Wheeler’s angelica (*Angelica wheelerii*), and the Utah shooting star (*Dodecatheon dentatum var. utahense*) – the probability of finding them at Solitude is listed in the DEIS as medium to high. The DEIS incorrectly states for each of these three species respectively that: “This species was not found in surveys of proposed project area (Intermountain Ecosystems 2000)”, “This species was not located within the Solitude study area during the 2000 rare plant survey (Intermountain Ecosystems 2000)”, “This species was not found in surveys of proposed project area (Intermountain Ecosystems 2000).” These three species are not in Intermountain Ecosystems’ list of plants surveyed in Table 1, p. 2 of their report, nor are they mentioned in the report at all. According to Larry England of the USFWS, there may be fewer than 1,000 of the Wasatch shooting star in existence, all in Big Cottonwood Canyon. This species, as well as all other sensitive plants with some expectation of occurrence, should have been surveyed for and the impacts to them analyzed.

**Response:** The EIS is correct in stating that these species were not located in the project area even though they were not specifically mentioned in the Intermountain Ecosystem report (2000) because they were covered under the broader survey objective of identifying species of botanical interest. See Response to Comments VEG-DC-19-2 and VEG-DC-6-6 for further discussion on plant survey efforts.

There are many other discrepancies between Intermountain Ecosystems report and the DEIS in the elevation range of the species surveyed by Intermountain Ecosystems. For example, Intermountain Ecosystems only lists the broadleaf penstemon (*Penstemon platyphyllus*) as occurring at 5,000 to 6,800 feet, while the DEIS lists the range of 4,800 to 8,600 feet. If the DEIS is correct, then Intermountain Ecosystems failed to look for it at the correct elevation.

**Response:** Discrepancies in the elevational range for this species can be found in the literature, likely reflecting incomplete and evolving understanding of these plants. The survey parameters were not strictly based on elevational limits reported in the literature. This, combined with surveys for other species with adjacent or overlapping limits, resulted in comprehensive coverage of the survey area.

What is really called for is a complete survey of all species of wildlife, birds, fish and plants at Solitude, as well as an ongoing monitoring plan, in order to ensure that no species is left out and the impacts to all species from Solitude’s changes are analyzed to insure the continued viability of all species and compliance with Forest Service policies.

**Response:** This comment has been addressed in Response to Comment VEG-DC-19-2. Please refer to this response. Please refer to Response to Comment WL-DC-19-2 for a discussion of wildlife surveys.

**DEVELOPMENT IMPACTS**

The area this [alpine] slide would traverse is home to a wide range of wildflowers, in addition to mature aspen and pine stands. This area is particularly popular with moose, which I encounter often while hiking in the area.
Response: The impacts to vegetation that would result from the construction of the alpine slide are discussed in Section 4.3.2.1 of the EIS. This discussion notes that the impacts of the slide would be greater due to the linear nature of the structure and the habitat fragmentation it would cause. Please refer to Section 4.3.3.2 and Section 4.3.4.2 of the EIS for a discussion of the potential impacts of an alpine slide on wildlife.

VEG-DC-19-1 Avalanche control will have to be increased in the canyon as a result of the increased human presence and this will have a negative impact upon the rare and sensitive plants and animals that use the canyon for refuge.

Response: Under all alternatives, avalanche control activities would increase somewhat in the area accessed by the Honeycomb Return lift. Under the current operating scenario, Solitude performs avalanche control in Honeycomb Canyon. Because avalanche control is already part of the existing management situation, the incremental impact of additional avalanche control activities on rare and sensitive plant species would be limited. Direct impacts to the rare and sensitive plant species due to avalanche disturbance would be unlikely. Consistent avalanche control is intended to result in more frequent but smaller avalanches. To the degree that control activities cause long-term changes in the frequency and the average return period of disturbance in an avalanche path, the size of the avalanche path community and its species composition and community structure could be altered. However, in reality the effect of avalanche control on the community is likely to be less than is theoretically possible because the area periodically experiences heavy, single-event storms that leave enough snow to produce a large slide despite control efforts. These large, uncontrolled avalanches affect vegetation more than control activities. Please refer to Response to Comment WL-DC-19-1 for a discussion of potential impacts of avalanches to wildlife.

VEG-DC-4-1 It appears that the bike trail could provide access to alpine tundra in Honeycomb Canyon to the west and north of the Summit Lift terminal. Depending on specific local conditions, access to alpine tundra can encourage off-trail use... Alpine tundra is extremely sensitive to vegetation or soil disturbance, and the effects are virtually irreversible, so we encourage the Ski Company and the USFS to eliminate the opportunity to access these areas wherever possible by routing the trail to avoid the potential for irreversible impacts.

Response: Although the bike trail would increase the access to high-elevation alpine type areas, the nature of these areas is such that off-trail use would be discouraged. These areas are steep and rocky and most guests would choose to confine their activities to the trail corridor. Nevertheless, due to the sensitive nature of these habitats and the potential damage off-trail activities can cause in these and other habitats, mitigation measure VEG-10 was included in the EIS (Section 2.6.11). This measure would require Solitude to provide interpretive signs and pamphlets explaining the need for visitors to remain on established trails.

VEG-DC-4-2 The USFS and the ski company should seek to avoid then minimize vegetation or soil impacts on alpine tundra and talus... Because of the irreversible nature of these impacts the USFS should seek, wherever possible, to avoid disturbing tundra and talus through roads, towers, utility corridors, summer recreation trails, and snow-making lines. We encourage the USFS to focus summer recreation opportunities toward sub-alpine systems that are more able to attenuate the effects of disturbance.
Response: As shown in Figure 4-3 and detailed in Tables 4-32 through 4-37 in Section 4.3.2.1 of the EIS, impacts to alpine, krummholz, and rock outcrops would be limited to 0.2 acre and would only occur under Alternatives 2, 3, and 5. The vast majority of the proposed elements and activities would occur in the sub-alpine zone or lower.

VEG-DC-6-9 The Appendices [of the DEIS for the] Wasatch-Cache National Forest [Forest Plan Revision], May 2001, on B4-9, delineates many of the impacts to plant species at ski resorts: “Threats from ski areas include direct trampling, mechanical construction, increased road and facility development, increased summer recreation, and habitat fragmentation. Additionally, impacts from snowmaking and avalanche control could directly and indirectly effect populations of TES plants and plant species at risk.” Further, the appendix goes on: “Additional impacts to rare plant species could result from increased snow due to packing and grooming and avalanche control and could result in extended time needed for snow melt in the spring time. Those species in forest habitat and rock outcrop habitat groups could be impacted by expansion efforts of existing ski areas as well.” The Solitude DEIS fails to fully analyze many of these impacts to rare plants, especially the shortening of the growing season due to increased snow production and compaction.

Response: Public and agency scoping was used to determine the scope of analysis. We reviewed the scope of analysis and determined that it adequately addressed the potential impacts associated with this project. The aforementioned Appendices of the Wasatch-Cache National Forest DEIS (USDA-FS 2001) are still in draft form, as is the Proposed Forest Plan that was drafted concurrently with the DEIS. However, many of the potential impacts listed in these Appendices were addressed in the analysis of potential impacts to vegetation associated with this project, found in Section 4.3.2 of the Solitude EIS. Some additional analysis of indirect impacts has been included in Section 4.3.2 of the EIS.

BIOLOGICAL EVALUATION/ASSESSMENT

VEG-DC-6-10 The DEIS should make reference to the Biological Evaluation/Assessment which is required as a part of the NEPA process and must be completed prior to any construction. The DEIS should also note in Table 1-2 the new Salt Lake City Regulations, effective July 1, 2001, which require a permit before spraying pesticides and herbicides in Big Cottonwood Canyon for vegetation management.

Response: A Biological Assessment was prepared concurrent with the EIS to meet the requirements of the Endangered Species Act and a Biological Evaluation was prepared concurrent with the EIS to meet the requirements of the Forest Plan. Reference to this BA/BE has been made in the EIS.

The use of herbicide or pesticides is not included as part of this proposal and thus the necessity of obtaining a permit to do so from Salt Lake City was not included in Table 1-2 of the DEIS. Please also see WL-DC-6-9.
NIGHT LIGHTING

VEG-DC-37-1 The Draft Environmental Impact Statement for Solitude Ski Resort's Master Development Plan fails to adequately address the affect of night lighting on animals and plants. Simply stating that night lighting and associate activity could cause wildlife to leave important winter habitat or otherwise negatively affect nocturnal behavior is not enough. The DEIS needs to state why wildlife will leave important winter habitat and how it will negatively affect their nocturnal behavior. Some areas that should be considered include the hormonal affect night lighting will have on plants and the influence of positive and negative phototropism. Animal rhythms should be addressed as changes in light determine how much animal's pineal glands secret melatonin. Melatonin affects the circadian rhythms and may result in depressed immune systems of the animals. This in turn makes mammals more sensitive to disease. More noise from people using the lighted trails will also stress the animals and negatively affect their immune system.

Response: The effect of night lighting on plants is expected to be negligible. The proposed night lighting would be used during the winter ski season. Most species are covered with snow during this period and would be unaffected by any change in the ambient light resulting from the night lighting system. Conifer and aspen trees would be exposed to the change in light; however, it would occur during a period of the year when these species are dormant for the winter unlikely to produce any phototrophic response. Please refer to the Response to Comment WL-DC-37-1 for a discussion of the impact of night lighting on wildlife.

VEG-DC-6-12 The DEIS fails to adequately address the effect of night lighting on animals and plants. Simply stating that night lighting and associated activity could cause wildlife to leave important winter habitat or otherwise negatively affect nocturnal behavior is not enough. The DEIS should state why wildlife will leave important habitat and how the night lighting will negatively affect their nocturnal behavior. Some considerations that should be analyzed are the hormonal effect night lighting will have on plants and the influence of positive and negative phototropism. Animal rhythms should be addressed, as changes in light determine how much an animal’s pineal glands secret melatonin. Melatonin affects circadian rhythms and may result in depressed immune systems. This in turn makes mammals more sensitive to disease. More noise from people using the lighted trails will also stress the animals and negatively affect their immune systems.

Response: Please refer to Response to Comment VEG-DC-37-1 for a discussion of the impact of night lighting on plants. Please refer to the Response to Comment WL-DC-37-1 for a discussion of the impact of night lighting on wildlife.

N. VISUAL QUALITY

NIGHT LIGHTING

VIS-DC-151-1 We also propose that you consider the following suggestions... that the proposed projects and features be implemented in a quality fashion with added attention to detail and design continuity. That the Nordic Trail Night Lighting (D5) proposed around Silver Lake at Brighton utilize temporary light fixtures and poles to be completely removed during non-
winter times of year. The Silver Lake area is in a picture perfect ‘open’ alpine setting and any such fixtures/poles would detract from its visual quality. Suggest that all utilities be buried or placed under boardwalk, and that all other ‘non-temporary’ light fixtures (such as those in wooded areas, Solitude Village, etc.) use black wire and attachments (not silver conduit) adjacent tree trunks, poles etc. placed at inconspicuous locations. In addition, suggest that all light fixtures be black if possible and be ‘down’ lighting to minimize visual impacts and spot light glare.

**Response:** Some of your suggestions are included in the proposed action. Section 2.4.2.3 of the EIS states that, “in most areas, utilities would be buried in existing trail and/or lift alignments. Low voltage, state-of-the-art lighting would be utilized. Lighting fixtures would be attached to lift towers, free standing poles or adjacent trees, as appropriate, and would be removed from the Nordic trails during the non-skiing season.”

Your other comments and recommendations will be reviewed and considered by the Decision Maker in the preparation of the Record of Decision (ROD). See also Response to Comment ALT-DC-151-1.

**VIS-DC-206-1** Night lighting of the Nordic Track, other ski trails, and outdoor skating rink – This would greatly impact nighttime scenic quality. Currently this area is sparsely lit, and any increase in lighting would decrease the relative rustic appearance of the area at night (and views from my property), and also detract from the natural setting during daytime hours because of the addition of lights, poles, and wires.

**Response:** As indicated in Section 4.4.1 of the EIS, night lighting would have a notable impact on the night landscape for residents and visitors to the canyon. See also Response to Comments VIS-DC-151-1 and VIS-DC-28-1.

**VIS-DC-39-1** The lighting fixtures in the Redman campground would be visible and would detract from the natural appearance.

**Response:** These facilities may be visible from certain viewpoints and could detract from the natural appearance of the surrounding landscape for some visitors. However, the issue to be addressed is if the proposed action complies with the Visual Quality Objective (VQO) established for the area, as discussed in Section 4.4.1 of the EIS.

**VIS-DC-27-1** Affected by this project are the neighboring Giles Flat property owners. Solitude has met with those owners on a number of occasions to mitigate their concerns and have come to an understanding agreeing to noise levels, light direction and hours of operation. The project now has the support of the community majority. We are prepared to implement these recently reached understandings which include landscaping and mounding as necessary.

That lighting understanding with Giles Flat also applies to the Easy Street night-lighting project.

**Response:** Mitigation measures that address both Forest Service direction and concerns of the community at large are addressed in Section 2.6 of the EIS. See also Response to Comment VIS-DC-28-1.
VIS-DC-27-2 The limited night lighting we [Solitude] are doing, in reality, will have far less impact than is currently publicly perceived. We will design a sensible lighting system with appropriate light levels and direction in each respective area to minimize impacts.

**Response**: Thank you for your comment.

VIS-DC-27-3 We [Solitude] have reached an understanding with our Giles Flat neighbors to light Easy Street from the north side, directing it uphill and hooded.

**Response**: Thank you for your comment.

VIS-DC-28-1 Information provided thus far is not very specific with regard to the nature of the lights and the degree to which the lighting would affect areas other than the trail itself. Accordingly, we may or may not have an objection to the proposed Nordic lighting.

**Response**: Design of the proposed lighting system has not been prepared but will comply with standards set forth by the Illuminating Engineering Society of North America (IESNA), the National Ski Areas Association (NSAA) which publishes design standards for ski trail lighting, and mitigation measures found in Section 2.6 of the EIS. A description of those standards and subsequent night lighting impacts, including light pollution, direct light exposure, and sky glow has been added to Appendix H of the EIS.

VIS-DC-60-1 Lighting at the proposed skating rink could be extremely extensive because it would glare directly into the front plate glass windows of my Solitude home. This problem could be solved if the authorization were conditioned upon facing the lighting uphill and having it so hooded as to avoid irritating lighting to Giles Flat residents.

**Response**: Discussions have occurred and agreements have been made between Solitude and a number of Giles Flat residents regarding ways to minimize impact of lights on residents as is discussed in Response to Comments VIS-DC-27-1, VIS-DC-27-2, and VIS-DC-27-3. See also Response to Comment VIS-DC-28-1.

VIS-DC-5-2 D-5 And D-6 Night Lighting: “Bright lighting of large areas should only occur where absolutely required by safety considerations, except that lighting for outdoor recreation areas shall be permitted. However, recreation areas must be sensitive to potential impacts its outdoor lighting may have on adjoining properties.” [FCOZ 19.73.110]

**Response**: Please see Response to Comments VIS-DC-27-1 and VIS-DC-60-1.

VIS-DC-37-1 The Solitude DEIS did not include all aspects of how the night lighting would affect the visual quality of the surrounding area. The lights, although dim, will reflect off snow and clouds making the light diffuse to a greater area. People who enjoy the canyons at night expect to be able to see the stars. The lighting will create an urban lighting pattern making this impossible.

**Response**: See Response to Comments VIS-DC-206-1 and VIS-DC-28-1.
Again it is our feeling that the proposed recreational night lighting will negatively impact the peace and quiet and the night time scenic values of the canyon. During the winter the light pollution from lighting is further increased when snow and low clouds reflect so much of the light.

**Response:** See Response to Comments VIS-DC-206-1 and VIS-DC-28-1.

The lighting will “trespass” onto our property and the entire upper canyon. It will waste energy and add to the sky glow. The neat thing about the canyon is you can still drive a half hour and get to a place where you can clearly see the night sky. This will be lost if the lighting is added.

**Response:** Should lighting be approved, Solitude would employ state-of-the-art technology that would help to minimize light leakage onto adjacent properties. However, some lighting would likely still “trespass.” See Response to Comments VIS-DC-206-1 and VIS-DC-28-1.

The Forest Service must analyze how night lighting on public land will impact the greatest number of people. The recreational value of night lighting must be balanced with the negative effects it has on those within the immediate area and beyond who use and visit Big Cottonwood Canyon for reasons and activities other than skiing or snowboarding. Since Solitude presents no evidence that its use of public lands will benefit the majority of visitors, it is incumbent upon the Forest Service to adhere strictly to its rules and guidelines as to what constitutes an appropriate use of public land.

**Response:** See Response to Comments VIS-DC-206-1 and VIS-DC-28-1. Chapter 1 of the EIS addresses the direction we are taking in regards to the benefit to the public of this use of public lands. Please also see Response to Comment LU-DC-6-4.

Night lighting visual impacts fail to conform to the retention and partial retention standards, in which most of the areas proposed for night lighting reside. Without an amendment to the 1985 Forest Plan, night lighting is simply prohibited. Such an amendment cannot possibly be construed to be “non-significant” for the substantive reasons stated above.

**Response:** The Visual Management System does not consider night illumination impacts in the context of the Visual Quality Objectives (VQOs). Therefore, compliance with VQOs can not be considered in analyzing the impact of night lighting. Therefore night lighting is not prohibited by the Forest Plan and no amendment would be required to approve it.

The dramatic change in the visual character of the upper canyon arising from night lighting will have a large negative impact on nearby residents. The Giles Flat residents will experience illumination of their yards and windows. Residents to both the east and west will lose their “night sky,” at least until 10 p.m., for up to six months of the year.

The DEIS did not include all aspects of how night lighting will affect the visual quality of the surrounding area. The proposed lighting will reflect off snow and clouds, making the light diffuse to a greater area. The Nordic center lights, although less bright than the proposed downhill lights, will have a similar negative effect. People who enjoy the canyons at night expect to be able to see the stars. During the times of use, which will be often and for extended periods, the lighting will create an urban lighting pattern, making stargazing impossible and generally urbanizing the canyon.

Response: Please see Response to Comment VIS-DC-28-1.

LAST CHANCE MINING CAMP

Now with this new proposed expansion of Last Chance Mining Camp, the structure right in front of our property will essentially TRIPLE in size, further blocking our view, and giving us nothing but buildings and activity and people and noise to draw our attention when we look out toward the mountain. This large proposed structure and turnaround also cuts off our winter accessibility for ski in and ski out capability.

Response: Visual impacts of the proposed expansion of LCMC are discussed in Section 4.4.1 of the EIS. The proposed expansion under Alternatives 2, 5, and 6 would block current views of the mountain for residents in the southwest corner of Giles Flat. Activity levels in and around this base area are anticipated to increase under Alternatives 2, 5, and 6. As a result, there would likely be more people and noise in the area. Existing winter ski access would also be affected by changes proposed under Alternatives 2, 5, and 6 for the Last Chance Mining Camp base area. See also Response to Comment VIS-DC-39-1.

Review of the building design and layout is under the jurisdiction of Salt Lake County. You may provide input to the county to insure building design and materials comply with guidelines established by the Wasatch Canyons Master Plan and are visually appealing. See also Response to Comment PUR-DC-5-1.

The proposed expansion at the Last Chance building will further take away enjoyed mountain views and replace it with an unattractive wall of structure.

Response: Please see Response to Comment VIS-DC-49-1.

Increasing the Last Chance Mining Camp facilities, (even if it is only the major expansion of 2400 square feet, instead of 32,500 square fee as in alternative #2), would take away the visual quality of the mountain from the centrally located homes in the Giles Flat area.

Response: Please see Response to Comment VIS-DC-49-1.

The Last Chance Mining Camp building includes expansion on both the north and east sides, as well as a northeast one story addition to the house ice grooming machines (all of the foregoing and herein referred to as the “Northeast Expansions”). The Northeast Expansions would materially and substantially obstruct, and therefore destroy, the view from our
property. Simply put, this proposed addition would absolutely destroy the visual quality now enjoyed by those in Giles Flat. No proposal could more negatively impact our property than this one. This visual quality destruction associated with this proposal would necessarily cause the value of our property to plummet. Accordingly, we adamantly oppose the Northeast Expansions.

Response: Please see Response to Comment VIS-DC-49-1.

ALPINE SLIDE

VIS-DC-20-1 Solitude would also construct and operate a permanent, concrete, two-track Alpine Slide, stretching 4500 feet with an 18% grade. If this does not scream “eyesore” to a sufficient extent to warrant rejection by the Forest Service, I don’t know what does.

Response: Section 4.4.1 of the EIS indicates the potential visual impact of the alpine slide, and Section 2.2.2.6 describes the alpine slide project.

VIS-DC-64-1 Alpine slide – A concrete strip running down the side of the mountain would be a scar on the landscape. For comparison, the slide at the Park City Mountain Resort can be seen for miles and does not fit in with the natural surroundings.

Response: Please see Response to Comment VIS-DC-20-1.

PULSE GONDOLA

VIS-DC-24-1 Constructing a pulse gondola would not only cause environmental damage in the process of its installation but would be an ugly visual impairment to the scenic vistas.

Response: The level of visual impact associated with construction of the pulse gondola has been outlined in Sections 4.4.1 C and D of the EIS. The Response to Comment VIS-DC-39-1 is also applicable here.

VIS-DC-6-7 Pulse Gondola: The DEIS fails to give any analysis or an adequate description of this proposed lift. The DEIS offers no rendition of it. There is no description of its height, number of towers or size or number of passenger cars. . . Lifts that run horizontally have a greater negative impact than lifts that are situated along the fall line of a slope. . . Allowing such construction on public land in Big Cottonwood Canyon is unacceptable due to the offensive urban nature of such a lift and the fact that the Forest Service has no obligation to remedy an alleged parking imbalance brought about solely by the voluntary actions of the permittee.

Response: A description of the Pulse Gondola has been incorporated into Section 2.4.2.2 of the EIS. See also Response to Comment VIS-DC-24-1.
GENERAL

VIS-DC-54-1 This new proposal would increase the noise, activity and lights, further limit our view and the accessibility to our home from the ski slopes, as well as exacerbate the many other problems we have already had to put up with.

Response: With regards to any potential blocking of adjacent landowners’ views, please see Response to Comment VIS-DC-49-1. Section 4.4.1 of the EIS details the change to visual conditions at Solitude as a result of all of the alternatives. Section 4.2.4 of the EIS discusses noise impacts. See also Response to Comments REC-DC-54-1 and NOI-DC-54-1.

VIS-DC-57-1 The overall impact attributed to long-term effects on the visual appearance of the mountain and noise generated by mountain operations is underestimated.

Response: Please see Response to Comments VIS-DC-49-1 and VIS-DC-54-1.

VIS-DC-5-1 Alternative 5 and 6 seem to be most in compliance with the intent of the FCOZ [Foothills and Canyons Overlay Zone] ordinance. Providing for tiered parking in areas where parking already exists and/or which are screened from view from SR-190 is preferable to new parking lots which would be highly visible and impact property that is currently relatively undisturbed.

Response: Some viewers may agree with your assessment while others may perceive a structured parking lot as offering too urban of an appearance to the base area. See also Response to Comments TRAN-DC-5-2 and PRO-DC-5-1.

VIS-DC-6-5 The Sol-Bright lift proposal does not fulfill any meaningful purpose or need. This lift will not improve access to skiable terrain, will not add to the comfortable carrying capacity of the resort, will not reduce shuttle traffic, and will have an offensive visual impact on those visiting the Twin Lakes region. The main purpose of the interconnect lift appears to be that of a marketing tool. In spite of much talk over the years about interconnect lifts, there has never been enough interest from the public to justify their construction. For several years, Brighton and Solitude offered a joint pass, “but that offer was discontinued two years ago due to lack of use,” DEIS, p. 2-17.

Response: The Purpose and Need section of the EIS (1.3) indicates that the Sol-Bright lift would create a more efficient link between Solitude and Brighton. It would be more efficient in moving guests between the resorts than the Sol-Bright trail alone. Solitude and Brighton are once again offering a joint pass and such a lift would facilitate joint operations. The linkage was not intended to increase CCC, nor was it necessarily viewed as a method to reduce shuttle traffic. Visual impacts of this proposal are detailed in Section 4.4.1 of the EIS. See also Response to Comment PUR-DC-6-7.

VIS-DC-6-6 Redman Lift And Trail: This proposed lift is unacceptable for a number of reasons. From a visual quality standpoint it will negatively impact the views, especially given its close proximity to SR190. It appears that the lift alignment lies within VQO retention area, making a Forest Plan amendment necessary to change the area to modification or partial
Solitude MDP Update Final EIS

retention. Since some or all of the lift and run would be outside the existing permit boundary, yet another Forest Plan amendment would be needed. Two allegedly non-significant amendments certainly become significant given their cumulative effect on the forest management directives found in the 1985 Forest Plan.

Response: Two amendments to the 1985 Forest Plan may be required to change the permit boundary to include the lift and for altering the VQO from retention to partial retention for the area being affected by the proposals in Alternative 2 and 3. Section 1.6.1.1 of the EIS will reflect these comments. Determination of the significance of any Forest Plan amendments will be based on the criteria set forth in the Forest Service Handbook (FHS 1909.12 Ch. 5). See also Response to Comment VIS-DC-6-2.

O. WATER QUALITY

SNOWMAKING

WAT-DC-161-1 The Snowmaking expansion is not a necessity and should not even be allowed as it endangers the water quality and quantity of water supply for residents of Salt Lake City.

Response: The purpose and need for snowmaking expansion is addressed in Section 1.3.1 and Table 1 of the EIS. See also the Response to Comment PUR-DC-161-1.

Section 4.2.1.2 of the EIS describes projected impacts to water quality associated with snowmaking under each alternative. In addition, Table 3-2 of the EIS depicts water quality data collected at the Forest boundary since 1974. This table shows that state water quality standards have not been exceeded since 1995, a period during which both Solitude and Brighton have been actively making snow. Due to water quality concerns raised by the Salt Lake City Public Utilities Department, Solitude has agreed to discontinue the use of Snowmax, an additive used to enhance snowmaking efficiency, pending the results of further study. Mitigation and monitoring issues related to water quality concerns are answered through Response to Comment WAT-DC-33-1.

Solitude has a Surplus Water Agreement with Salt Lake City Department of Utilities to use up to 40 million gallons of water per year from Big Cottonwood Creek for snowmaking purposes. The ability to use this water is limited by established minimum in-stream flows and other water users. The Wasatch-Cache National Forest has established minimum stream flows for Big Cottonwood Creek based on average minimum monthly flows calculated from measurements obtained from 1901 to 1998. Solitude’s current agreement with Salt Lake City Department of Public Utilities also limits water withdrawal based on the prior appropriated water rights of entitled downstream water users. Water withdrawal is only allowed when water is available in excess of both the established minimum stream flows and other prior appropriated rights of downstream users. In alternatives where water withdrawal directly from Big Cottonwood Creek is proposed, a diversion weir would be installed that would prohibit water withdrawal if stream flow is below the established minimum requirement. Please see Section 4.2.1.1 of the EIS and Appendix D for further discussion of water quantity issues.
WAT-DC-18-1  Snowmaking – Snowmaking degrades water quality and should be banned in canyons that provide drinking water.

Response: Please see Response to Comment WAT-DC-161-1.

WAT-DC-206-2  Snowmaking – don’t need any more. Noisy, ugly; even though the water catchment may be on private land, the water that will be trapped is currently in the public domain (Big Cottonwood Watershed) and the potential for contamination along with increase treatment costs are associated with its use for snow-making activities. Also, if it extends the season, there is increased traffic.

Response: Please see Response to Comment WAT-DC-161-1. See also Response to Comment TRAN-DC-206-2 for a discussion of traffic concerns.

WAT-DC-63-1  Solitude’s alternative calls for 250 acres of snowmaking while other alternatives mention 200 acres. Nowhere could I find information about why those 50 acres were so critical. Why does Solitude need to increase snowmaking at all?

Response: The purpose and need for snowmaking expansion is addressed in Section 1.3.1 of the EIS and Table 1-1. Alternatives 4 and 5 result in reduced snowmaking coverage by prohibiting any system expansion on NFS land. This is in agreement with those alternatives’ objectives to consider potential impacts to non-resort residents and canyon visitors and to consider potential impacts to natural resources, respectively. Upon Salt Lake County approval, Solitude may expand their snowmaking system on their privately owned land, resulting in the standard 200 acres of coverage proposed under all alternatives. The additional 50 acres results from any coverage permitted on Forest Service land, which may be allowed if decision makers conclude snowmaking expansion on Forest Service land furthers forest management objectives and the project’s purpose and need as outlined in Chapter 1.

WAT-DC-6-5  Alternative 1 states that snowmaking will be expanded to 200 acres while Alternative 2 says it will be expanded to 250 acres. Nowhere could justification be found for the additional 50 acres. What is so important about coverage on these 50 acres? Without this extra acreage, could Solitude supply its snowmaking system using current water resources (Lake Solitude and culinary water)?

Response: Please see Response to Comment WAT-DC-63-1. Solitude currently can convert eight hundred thousand to one million gallons of water per day to machine-made snow for a three-day period. After this time, water must be pumped from its culinary source to refill Lake Solitude (and not make snow) or make snow directly from the culinary source (and not refill the lake). Solitude currently has 100 acres of snowmaking coverage. In order to maintain the snowmaking system efficiency at its current level, any system expansion would require additional water sources.

WAT-DC-33-1  Snowmaking is probably a necessary evil, but the FS should insist on monitored restoration after the pipe is buried. Someone needs to accurately monitor the chemical content of the runoff as a result of snowmaking and set standards. Once the concentration reaches certain limits, snowmaking stops, no questions asked.
Response: Concerns related to the disturbance that pipe burial produces are addressed through implementation of several mitigation measures. Mitigation measure SWQ-3 recommends eliminating burial of snowmaking lines in some specified areas due to steep slope gradients and associated shallow soils, which hinder revegetation efforts. Placement of sediment fencing and related sediment control structures for particular areas of pipe burial are stipulated under mitigation measure SWQ-7. Follow-up monitoring of revegetation efforts is required under mitigation measures VEG-4 and VEG-5. Mitigation measure SWQ-1 requires that all Conservation Management Practices (CMPs) listed under the headings of Performance Objectives, Vegetation Removal, Earthwork, Temporary and Permanent Erosion and Sedimentation Control, and Monitoring and Maintenance be implemented. This measure has been edited in the EIS to also include CMPs under Snowmaking.

Water quality is currently monitored and will continue to be monitored in Big Cottonwood Creek at the Forest boundary. No change in the chemical content of runoff is foreseen to occur as a result of snowmaking. Water monitoring results from 1974 to present are included in Table 3-2 (Section 3.2.1.2). The standards in place were established by the state and are described in Section 3.2.1.2 of the EIS. State standards have not been exceeded since 1995. Please refer to Section 4.2.1.2 of the EIS for further discussion of projected impacts to water quality associated with snowmaking under each alternative.

WAT-DC-206-1 Withdrawals from Big Cottonwood Creek – should not be permitted. The water is needed for culinary (Municipal and industrial) purposes; the streambed looks better with water in it; and the fish and riparian species fare much better when water is present.

Response: Please see Response to Comments WAT-DC-161-1. As stated in mitigation measure AQU-4, an in-stream flow study will be conducted to monitor the effects of water withdrawals if Alternative 2, 3, or 6 is selected. If the study concludes flows are inadequate to support aquatic life, the minimum stream flow requirements will be adjusted accordingly. Please see Section 4.2.1.1 of the EIS for further discussion of water quantity issues.

WAT-DC-63-2 I am also concerned about monitoring stream flows to insure that low rates do not fall below the established limit. How will this be done?

Response: Please see Response to Comments WAT-DC-161-1 and WAT-DC-206-1, and Section 4.2.1.1 of the EIS for discussion of water quantity issues.

WAT-DC-6-1 Several of the alternatives involve removing water directly from Big Cottonwood Creek for use in snowmaking. Throughout the DEIS there are assurances that minimum in-stream flows will be maintained during periods of water removal. But what exactly is the minimum flow needed to protect aquatic habitat?

Response: Minimum stream flows, such as those established for Big Cottonwood Creek, are derived from average minimum monthly flows. Big Cottonwood Creek’s minimum stream flows were determined using measurements from 1901 to 1998. Over this period of time many changes have occurred to the canyon while the aquatic habitat and riparian area of Big Cottonwood Creek have remained intact. As stated in mitigation measure AQU-4, an in-stream flow study will be conducted to monitor the effects of water withdrawals if Alternative 2, 3, or 6
is selected. If the study concludes flows are inadequate to support aquatic life, the minimum stream flow requirements will be adjusted accordingly. Please see Response to Comments WAT-DC-161-1 and WAT-DC-206-1, and Section 4.2.1.1 of the EIS for further discussion of water quantity issues.

WAT-DC-4-2 The DEIS indicates the minimum in-stream flow requirements for Big Cottonwood Creek at Solitude that would be applicable if the snowmaking diversion weir is approved. However, we found no information in the DEIS on the existing flows at Solitude for the months of October through January. Without this information, it is not possible to understand the extent of impact to be expected from operation of the weir. Ideally, the DEIS would include data regarding the mean and historic low flows for each month of anticipated snowmaking. The DEIS should then evaluate the average and maximum impact to stream flow, and therefore to aquatic habitat resulting from the project. If the Wasatch-Cache National Forest (WCNF) has a standard for aquatic habitat, the DEIS should indicate whether the operation of the weir would comply with the standard.

Response: Minimum in-stream flows for Big Cottonwood Creek at Solitude were established for the months of October through January and can be found in Section 3.2.1.1 of the EIS. The methodology used to extrapolate minimum monthly flows from historic flow data at the Forest boundary are discussed in Section 3.2.1.1 and Appendix D of the EIS. These methods are consistent with standard scientific practices and meet the analytical requirements of NEPA.

The minimum in-stream flows outlined in Table 3-1 (Section 3.2.1.1) are relevant for determining whether Solitude may withdraw water from Big Cottonwood Creek, as permitted in their Surplus Water Agreement. Water withdrawal is not allowed if the stream flow falls below the minimum levels. Please see Response to Comments WAT-DC-161-1 and WAT-DC-206-1, and Section 4.2.1.1 of the EIS for further discussion of water quantity issues. WCNF requirements are specifically addressed in the EIS.

WAT-DC-6-2 According to AQU-4 on p. 2-79, a study will be conducted to determine the effects of water withdrawals for snowmaking on Big Cottonwood Creek. If negative impacts are found, will Solitude be forced to discontinue withdrawal before permanent damage is done? Or will pressure be exerted to leave the minimum flow level where it is because of all the equipment costs (weir, pump, and snowmaking lines) that Solitude must recoup? How will the public be assured that minimum stream flows levels are being maintained, especially in low water years or drought conditions?

Response: As stated in the EIS Section 2.6, mitigation measure AQU-4, adjustments will be made if a Forest Service study determines that the current minimum stream flow guidelines are no longer sufficient or accurate.

WAT-DC-6-3 A second concern with this proposal is that water is being withdrawn during months when flow levels in Big Cottonwood Creek are at their lowest. Is there really enough excess flow in the creek during these months to meet the demands of snowmaking (800,000 – 1,000,000 gallons/day according to the DEIS)? The statement is made that unless withdrawal from Big Cottonwood Creek is allowed, the expanded snowmaking system will not
have enough water supply. Nowhere, however, can one find an estimate in the DEIS as to how much water flowed down Big Cottonwood Creek during the months in question.

**Response:** Please see Response to Comments WAT-DC-161-1, WAT-DC-206-1 and WAT-DC-4-2. See also Section 3.2.1.1 of the EIS to review minimum in-stream flow data for the period of October through January.

**WAT-DC-6-4** Also, is Brighton planning to divert water from Big Cottonwood Creek during these same low-flow months to supply their expanded snowmaking system? It appears that Big Cottonwood Creek will be over-allocated. How can this plan be approved without some idea as to how much water is even available?

**Response:** Water from Twin Lakes and Lake Mary is used if needed to augment Big Cottonwood Creek streamflow during the late summer months. Brighton’s surplus water contract allows for the use of up to 50 acre-feet of water from Lake Mary for snowmaking. Please see Response to Comment WAT-DC-161-1 for discussion of how Solitude’s water allocation relates to other water uses of Big Cottonwood Creek.

**WAT-DC-6-6** “Flatlining” of Big Cottonwood Creek for up to four months at its minimum mean monthly levels is a possibility in some alternatives (DEIS p.4-6). This should not be allowed. Alternatives in which snowmaking water withdrawals from Big Cottonwood Creek are allowed must replace the ‘minimum flow’ regulation with a mechanism that is guaranteed to maintain more normal stream flows – perhaps allowing only a certain amount of water to be withdrawn.

**Response:** Please see Response to Comments WAT-DC-206-1 and WAT-DC-6-1.

**WAT-DC-3-2** We recommend against diverting water for snowmaking from Big Cottonwood Creek which is listed as a State of Utah Class II stream. The watershed also has two State of Utah Conservation Agreement species, the Bonneville cutthroat trout (*Oncorhynchus clarki utah*) and spotted frog (*Rana pretiosa*). If the diversion is constructed, fish passage should be provided for adult and juvenile fish and the diversion should be screened to eliminate fish from entering the diversion canal or pipe.

**Response:** As cited in the EIS (Section 3.2.1.2) the beneficial use classifications assigned to Big Cottonwood Creek by the Utah Division of Water Quality are 1C, 2B, and 3A. These designations determine water quality standards for particular constituents that must be met, as shown in Table 3-2 (EIS, Section 3.2.1.2). The 3A designation refers to protection for cold-water species of game fish and other cold-water aquatic life. We consider attainment of these standards during decision-making. Please also see Response to Comment WL-DC-3-1 for wildlife concerns involving the diversion weir.

**WAT-DC-6-7** The method used to estimate minimum streamflow in Big Cottonwood Creek at Solitude (Appendix D-2) is certain to underestimate that flow... the flow at Solitude is calculated according to the proportion of the watershed that drains through that point. However, far more precipitation falls at higher altitudes in the Big Cottonwood Canyon watershed than at lower altitudes... On average, then, an acre above Solitude contributes more to the flow...
measured at the mouth of Big Cottonwood Canyon than an acre below Solitude. Since the DEIS ignores this fact, its estimates must be downwardly biased. The use of such unreliable and biased estimates threatens the health of the Big Cottonwood Canyon watershed... The failure of the DEIS to acknowledge this and account for those uncertainties deeply flaws its analysis.

Response: Thank you for your comment. It is true that the upper portion of a high-elevation watershed receives and stores more snow than the lower portions, which the equation in Appendix D does not account for. As a result, more water would flow through a point located at Solitude than calculated. However, this greater proportion of precipitation is primarily in the form of snow, which is stored until spring and would only affect streamflow during runoff months. Solitude proposes to take water from Big Cottonwood Creek in the late fall and early winter months. Also, even the lower tributaries in Big Cottonwood Canyon stem from high-elevation headwaters, where precipitation conditions are similar to the high-elevation areas further up the canyon.

W A T- DC-6-8 There are two far simpler solutions to the problem... The second possibility is to measure the pattern of streamflow at Solitude for at least one year before any water withdrawals are contemplated. The DEIS should contain no numerical targets for minimum streamflow under any alternative, since no reliable data are available on which to base those targets. Instead, a method for maintaining an appropriately conservative streamflow pattern should be prescribed. The method would make use of data yet to be collected.

Response: Please see Response to Comments WAT-DC-161-1, WAT-DC-206-1, and WAT-DC-4-2. Stream flow data collected consistently for 70 years is considered reliable.

W A T E R Q U A L I T Y

WAT-DC-167-1 The area is important for so many reasons. It is the headwaters for the Big Cottonwood Canyon (BCC) stream. This stream is the source of over one fourth of the drinking water for Salt Lake county residents. Developments like the Sol-Bright chairlift, Redman campground chairlift, and the permanent Alpine slide will certainly increase soil erosion, thereby decreasing the groundwater quality and stream water quality. This will affect the cost of treatment at the water treatment plant and have direct impacts upon the riparian vegetation, aquatic plants, birds, rodents, and mammals that rely on the BCC stream for drinking and habitat.

Response: Potential impacts to water quality and wildlife are discussed extensively in EIS Sections 4.2.1.2 and 4.3.3, respectively. These impacts would be reduced through the implementation of CMPs (see EIS Appendix C) and mitigation measures listed in Section 2.6 under Aquatics, Soils and Water Quality, Vegetation, and Wetland and Riparian Areas. Furthermore, erosion is not generally a factor in groundwater contamination. These issues will be considered before any Forest Service decisions are made.

WAT-DC-26-1 As if that were not reason enough to protect a National Forest in a very special way, our Tri Canyons provide drinking water for a population of 400,000 people each day (perhaps twice that amount if one takes into account the number of people commuting to work or visiting Salt Lake City). Big and Little Cottonwood Canyons alone provide over one-third of the surface water for Salt Lake City and part of the county. In addition, the mountain
block is responsible for replenishing aquifers for the entire valley. A recent study funded by SLCDPU indicates that the mountain block recharge of aquifers is much more rapid than previously thought. At the present time, the quality of our water exceeds federal standards. However, SLCDPU admits that they have no idea how fast water degradation will occur as the Tri Canyon area exceeds its human carrying capacity. They point out that this capacity is now being strained on weekends and holidays. As the urban population next to those well-loved canyons swells, that capacity will soon become strained on a daily basis.

Response: Impacts to water quality and quantity are disclosed in Sections 4.2.1 4 and 4.5.1 of the EIS. As indicated in Section 4.2.1.1, Solitude is only allowed to draw water from Big Cottonwood Creek that is in excess of the appropriated water rights of downstream users. If there is no excess water, Solitude is precluded from drawing from this source for snowmaking. Section 4.2.1.3 explains cumulative impacts to water quality, and mitigation measures to maintain water quality. Mitigation measures are also listed in the EIS, Section 2.6.8.

Please see Response to Comment WAT-DC-62-2 for a discussion of the carrying capacity concept. Information related to canyon visitor numbers can be found under Transportation, Section 3.4.2 of the EIS.

WAT-DC-61-1 Lake Solitude lies in the water source area for the Kentucky-Utah tunnel, which supplies drinking water to the community of Silver Fork.

Response: Please see Response to Comment WAT-DC-61-2.

WAT-DC-61-2 The DEIS does not address the effect of dredging on water quality in the Kentucky-Utah tunnel. The tunnel water quality could be seriously affected by release of toxic heavy metals during the dredging operation. The tunnel water quantity could also be seriously affected by the dredging operation. In addition, the DEIS does not specify the nature and composition of the material that would be dredged nor how this material would be disposed of to prevent release of toxic substances to the environment.

Response: As cited in *Groundwater in Bedrock in Utah* (Marsell 1964), a hydrogeologic connection between Lake Solitude and the Kentucky-Utah tunnel was accidentally discovered by miners. The tunnel supplies water to the community of Silver Fork. Therefore potentially adverse effects that dredging or raising the dam at Lake Solitude may have on water quality and quantity must be investigated. We recommend that a hydrogeologic study may be necessary, in which the relation between Lake Solitude and the Kentucky-Utah tunnel and the potential effects to water quality and quantity from dredging and/or raising the lake level are analyzed (Condrat 2001). This information concerning the connection between Lake Solitude and the Kentucky-Utah Tunnel, and the resulting need for further investigation, has been added to the EIS (Sections 3.2.1.2 and 4.2.1.2).

Ore processing did not occur in the upper reaches of Big Cottonwood Canyon. Piles of rock surrounding Lake Solitude that were left from mining activities are wasterock, not mine tailings (Goar 2001). Therefore, it is assumed that dredging or raising the lake level will not degrade water quality through the addition of heavy metals.
If dredging activities were permitted, dredged material would be relocated to the toe of the slope below the dam (Goar 2001). Mitigation measure AQU-3 requires implementation of sediment ponds and detention traps in Mill F South Fork prior to dredging. One sediment pond must be located near the mouth of Mill F South Fork to remove sediment before the stream empties into Big Cottonwood Creek.

Lake Solitude and the land adjacent to it are privately owned. Final approval to dredge the lake or raise the dam is not within Forest Service authority. The Army Corp of Engineers will make the final decision concerning activity in and around Lake Solitude.

WAT-DC-61-3 Disturbance of Mine Waste Sites. The Solitude ski area and the proposed actions will likely affect some of the numerous sites of mine waste. This waste was produced from underground mines in the area and contains sulfide minerals rich in toxic heavy metals such as lead, arsenic, antimony, and others. Disturbance of these wastes will expose the heavy metal sulfides to atmospheric oxidation. Oxidation increases the solubility and releases the heavy metals to the environment. The DEIS makes no mention of the potentially serious effect on water quality.

Response: The piles of rock surrounding Lake Solitude that were left from mining activities could be disturbed if dredging or raising the dam is approved. However, it has been determined that the piles are wasterock, not mine tailings (Goar 2001). Ore processing did not occur in upper Big Cottonwood Canyon. This information has been added to the EIS, Section 4.2.1.2.

WAT-DC-1-4 The DEIS proposes to modify Lake Solitude to allow pumping of Big Cottonwood Creek water into the lake for storage to support snowmaking operations. The DEIS did not provide sufficient analysis of the proposed impacts to allow for an informed decision on this proposal. The impacts to water quality, public safety and the natural environment need to be identified and evaluated.

Response: Please see Response to Comment WAT-DC-61-2 concerning dredging or dam alterations at Lake Solitude. Please see Response to Comments WAT-DC-161-1 and WAT-DC-206-1 concerning water withdrawal from Big Cottonwood Creek. No threats to public safety were identified to be associated with pumping water from Big Cottonwood Creek into Lake Solitude.

WAT-DC-6-12 The Solitude ski area and the proposed actions will likely affect some of the numerous sites of mine waste. The DEIS makes no mention of the potentially serious effect of disturbed mine waste on water quality.

Response: Please see Response to Comment WAT-DC-61-3.

WAT-DC-6-14 Lake Solitude lies in the water source area for the Kentucky-Utah tunnel, which supplies drinking water to the community of Silver Fork. The lake has been accumulating sediment for decades, some of which must come from the mine waste at the mouth of the Solitude Tunnel nearby and other nearby mine waste sites.
The DEIS does not address the effect of dredging on water quality in the Kentucky-Utah tunnel. The tunnel water quality could be seriously affected by release of toxic heavy metals during the dredging operation. The tunnel water quantity could also be seriously affected by the dredging operation. In addition, the DEIS does not specify the nature and composition of the material that would be dredged nor how this material would be disposed of to prevent release of toxic substances to the environment.

**Response:** Please see response to comments WAT-DC-61-2 and WAT-DC-61-3.

WAT-DC-6-15 Development of Lake Solitude should not be permitted, because there is considerable risk to water quality in the Kentucky-Utah Tunnel, and because no plan for disposal of the dredged materials is provided.

**Response:** Please see Response to Comment WAT-DC-61-2.

WAT-DC-61-4 Avalanche control uses explosives. The explosives leave a residue in the snow. The residue is composed of toxic and mutagenic nitrogenous compounds that ultimately find their way into the water with a resultant deterioration of water quality.

**Response:** Solitude annually uses approximately 2,000 pounds of an explosive called Penilite, which breaks down into pentaerythyltetra nitrate and trinitrotoluene (Goar 2001). There are currently no set drinking water standards to guide monitoring of these nitroaromatic compounds. The EPA’s Drinking Water Contaminant Candidate List (CCL), which contains some nitroaromatic compounds, is a list of those contaminants not subject to any primary drinking water regulation, but that may occur in water supplies and may require future monitoring under the Safe Water Drinking Act (Naftz et al 2001).

Researchers at USGS have begun assessing the potential effects to water quality from explosives used in avalanche control. The analysis of lake sediment samples taken from sites in the Wasatch Mountains is not yet complete, but preliminary results show small, but detectable concentrations exist. Detectable concentrations in the snow would become diluted as snow melts, and potentially further reduced through processes such as UV and microbiological degradation (Naftz 2001). Results of this study will be useful in the future for water quality monitoring. This information has been added to the water quality discussion of the EIS, Section 3.2.1.5.

As cited in the Final Environmental Impact Statement: Wasatch Powderbird Guides Permit Renewal (USDA-FS 1999) Salt Lake City Department of Public Utilities reports that monitoring for nitrates has occurred for several years and there has been no indication of increased concentrations due to explosive use.

WAT-DC-6-13 Avalanche control uses explosives that leave a residue in the snow... The residue is composed of toxic and mutagenic nitrogenous compounds that ultimately find their way into the water with a resultant deterioration of water quality.

**Response:** Please see Response to Comment WAT-DC-61-4.
The building of the Honeycomb Canyon return lift would necessitate the increase in the frequency and intensity of avalanche control activities. Increasing the use of these compounds in a watershed could have negative impacts on the supply of drinking water. The explosions as well as the residue will pose a threat to the many sensitive plants and animals that have habitat in Honeycomb Canyon. The DEIS should analyze the negative effects that the increased use of nitroaromatic explosives will have on the environment, especially in Honeycomb Canyon.

Response: Please see Response to Comment WAT-DC-61-4 addressing potential water quality impacts related to avalanche control. See also the Response to Comment WL-DC-6-13 regarding impacts of avalanche control to sensitive plants and wildlife.

The canyons serve as valuable watersheds for Salt Lake City. Late in the 1940's the U.S. Public Health Service (at that time the federal agency responsible for monitoring interstate water quality) was on the verge of de-certifying Salt Lake City's culinary water for use in interstate commerce. This would have forbid the use of Salt Lake's water from use in interstate commerce such as airlines, trains, and even the marketing of water-related products from interstate markets. The reason for such possible decertification was water pollution that was generated by ski related developments in the canyons, primarily Big and Little Cottonwood.

Response: Thank you for your comment. Water quality in Big Cottonwood Canyon has improved since the 1940's, and virtually all ski-related activities have taken place since that date.

The Draft Environmental Impact Statement (DEIS) fails to address the real impacts on water quality and the watershed. The Environmental Impact Statement states, "Development at Solitude has the potential to increase bacteria in Big Cottonwood Creek due to increased use of the canyon and the potential for increased year-round recreational opportunities at the canyon's two ski resorts." The plan fails to address this impact in any meaningful way. Mitigation of the cumulative effects of the proposed development is simply shifted to Salt Lake City to develop "regulatory control necessary to accurately identify water quality impacts stemming from increased use of the Big Cottonwood watershed." This approach is unacceptable. Impacts to water quality should be minimized in the proposed plan either effectively mitigated or eliminated.

Response: Conservation Management Practices (CMPs) and mitigation measures that aim to eliminate or reduce impacts to water quality are included in the EIS. Section 2.6 of the EIS and Appendix C include further discussion of these mitigation measures and CMPs, required for projects on NFS land. These practices are also strongly recommended for projects on private land. We stipulate that proponents abide by these items to assure compliance with laws, ordinances, or policies for the protection of affected resources. Activities on private land are subject to state, county, and city regulations.

The DEIS fails to address the impacts of snow removal and storage on water quality.

Response: Snow removal and storage present an opportunity for sand, salt, and automotive chemicals to enter Big Cottonwood Creek, but water quality data in Table 3-2 (Section 3.2.1.2 of
the EIS) shows state water quality standards have not been exceeded since 1995. Any parking lot on NFS land is engineered and managed under an approved parking lot plan, also referred to as a snow storage plan. Submitting these plans to Salt Lake County is also strongly recommended for parking lots on private land. This additional information has been added to Section 3.2.1.3 of the EIS. Currently, a detention basin located northwest of the Moonbeam parking lot collects parking lot runoff from this parking area. More details on the design of Moonbeam parking lot are included in the EIS, Section 4.2.1.2. Please also see Response to Comment WAT-DC-6-11 for more information concerning parking lot runoff.

As mentioned under effects to water quality from the No Action alternative (Section 4.2.1.2 of the EIS), snow removal practices on private land would continue as they currently exist, allowing snow to be pushed to within 50 feet of Big Cottonwood Creek. Snow removal activities on NFS land would incorporate more restrictions such as no storage permitted north of the Moonbeam lot, as proposed under the Proposed Action, Alternative 3, and Alternative 6.

WAT-DC-164-1 Specifically I am concerned about the effect that 3 acres of parking would have on the quality of the stream flow and drinking water for the residents of Salt Lake. I remember in Brighton’s last expansion the Forest Service said there could be no more parking allotted on FS land.

Response: The 1985 Wasatch-Cache National Forest Land and Resource Management Plan (Forest Plan) states that no additional parking capacity for downhill ski areas in Big and Little Cottonwood canyons is allowed, except for mass transit space. Approval of any alternative that would increase parking capacity beyond the existing acreage would require an amendment to the Forest Plan. The proposed parking lot additions and expansions equate to a relocation of parking areas from private land to NFS land.

Concerning water quality issues, some parking lot runoff is collected in the detention pond located to the northwest of Moonbeam parking lot. Snow storage plans will delineate storage areas. Mitigation measures SWQ-6 and SWQ-7 require the placement of sediment basins and sediment fencing during parking lot construction. Further discussion of impacts from parking lot runoff to water quality is included in Response to Comment WAT-DC-6-11.

WAT-DC-6-11 Pulses of pollution from roadway and parking lot runoff (oil, fuel, antifreeze, sand, salt, mud) occur during snowmelt and may cause very high temporary concentrations of pollutants in Big Cottonwood Creek immediately below Solitude. The effect of these short term, localized, high concentrations of pollutants may be very damaging to riparian and aquatic flora and fauna during times when their rapid growth is critical. The DEIS must acknowledge that average pollution levels, measured after much dilution at the bottom of Big Cottonwood Creek, may have little bearing on the actual effect of the pollution on natural resources near the pollution source. Monitoring programs are recommended.

Response: Direct discharge from parking lots does not occur at Solitude due to the placement of detention basins, berms, sediment entrapment basins, and the naturally occurring vegetative buffer. For example, the detention basin located northwest of the Moonbeam parking lot collects runoff, which then overflows, disperses, and eventually percolates through the soil and...
vegetative buffer. These percolation and filtration processes eliminate direct discharge to the stream. The EIS has been edited to include more of these design details.

As outlined in mitigation measure T&P-7, a parking plan (also referred to as a snow storage plan) must be submitted to us and approved prior to parking lot construction. These plans include engineering designs for runoff, snow storage and parking delineations, and direction for snow storage and peak period parking management. Submitting these plans to Salt Lake County is also strongly recommended for parking lots on private land. Also, mitigation measure AQU-2 addresses the installation of screens or similar devices on retention basins, if they are determined to be necessary, for further capturing of oils and other pollutants (this measure has been edited in the EIS for clarification). Mitigation measure WET-8 ensures that monitoring effects from snow storage is ongoing. The EIS has been edited to include a more informative description of the contents of a snow storage plan (T&P-7). Please see Response to Comment WL-DC-6-1 for discussion of the potential impacts to aquatic flora and fauna.

WAT-DC-3-4 Stormwater detention pond plans should be incorporated into existing and planned roads and parking lots to protect water quality.

**Response:** A detention basin located northwest of Moonbeam parking lot currently collects parking lot runoff. All action alternatives include the development of a drainage system, to be buried in the existing road network, and a new sedimentation pond to control surface runoff and reduce impacts to Big Cottonwood Creek. Mitigation measures AQU-2 and WET-8 specify additional measures to protect the stream from pollutants.

As noted in Appendix C, Storm Water Pollution Prevention Plans (SWP3) are required for projects disturbing substantial areas of soil surface. Solitude must submit site-specific SWP3s with annual operating plans to us. Please see Section 4.2.1.2 of the EIS for further description.

WAT-DC-1-2 The proposed plan seeks to use 3.39 acres of public land to replace parking that Solitude essentially removed from their privately owned property so those lands could be used for residential and commercial developments... The result is increased degradation of water quality both from increase development and impacts due to parking expansion.

**Response:** Thank you for your comments. Please see Response to Comments WAT-DC-164-1 and WAT-DC-6-11. See also Response to Comment TRAN-DC-1-1.

WAT-DC-4-4 Snow disposal in waters of the US or in riparian areas has been considered a violation of the Clean Water Act where pollutants are involved. Page 2-18 indicates that the Forest Service and Corps of Engineers intend to monitor wetland and riparian areas adjacent to snow disposal sites to insure adequate protection. We encourage the Forest Service to include automotive chemicals (examples could include: oil, MBTE, ethylene glycol) in the monitoring program as it was not possible to determine from the document whether the proposed mitigation measures would eliminate impacts from such pollutants.

**Response:** Thank you for your comment. We are aware that automotive chemicals may contribute to water quality degradation. Mitigation measure WET-8 requires monitoring effects...
of snow storage on wetland and riparian areas. AQU-2 proposes additional measures to catch automotive chemicals before they enter streams. Also, carefully planning where snow storage areas are to occur, as outlined by the required parking plan under mitigation measure T&P-7, would help reduce pollution input to streams.

WAT-DC-1-5 The proposed Action allows the construction of a new Redman Lift and Run – We have a concern that locating this lift and run in such close proximity to the Big Cottonwood stream will impact water quality.

Response: This project was identified in the EIS as having a moderate erosion risk prior to mitigation. The close proximity to Big Cottonwood Creek and impact to wetland and riparian areas are included in its description and will be taken into consideration by us prior to decision-making. CMP's (Appendix C) and mitigation measures (Section 2.6) have been designed to reduce or eliminate potential impacts.

WAT-DC-3-1 A bridge should be constructed over Big Cottonwood Creek instead of an arch culvert to minimize impacts on stream hydrology and wetlands. The bridge should fully span the floodplain and wetlands.

Response: Thank you for your comment. Alternatives 4, 5, and 6 propose installing either an open-bottom half arch or spanning bridge in place of the existing culvert bridge. This would allow the stream habitat and gradient above and below the structure to return to conditions prior to bridge installation.

WAT-DC-7-1 Big Cottonwood is a Category 1 High Quality Water pursuant to Utah Administrative Rule R317-2-12. Meaning that the anti-degradation water quality standard applies, which means that all of Solitude’s proposals require protection such that its high quality will be maintained. The nature of the proposed action is such that even after construction it will continue to contribute pollutants into this high quality stream. For the Forest Service to approve a project that would, at all degrade existing high water qualities is a violation of high water quality standards.

Response: Thank you for your comments. The anti-degradation standard set for the segment of Big Cottonwood Creek above the Forest boundary ensures the existing quality, which is higher than set standards for its designated uses such as culinary water, is maintained and protected. Water quality of Big Cottonwood Creek will continue to be monitored at the Forest boundary. This anti-degradation standard will be used as a measure of acceptability during the decision-making process. Conservation Management Practices, mitigation measures, and monitoring efforts are required for any construction activities on NFS land approved by the Forest Service. These practices and measures intend to assure compliance with laws, ordinances, and policies for the protection of affected resources.

WAT-DC-3-3 We recommend against widening roads, trails, or placing underground utilities that could, either directly or indirectly (through erosion and sedimentation), impact floodplains or wetlands.
Response: Thank you for your comment. A project element's potential for increasing erosion and sedimentation, and its impact to wetland and riparian areas, is considered in the decision-making process. Conservation Management Practices (EIS Appendix C) and mitigation measures (EIS Section 2.6) have been designed and would be implemented with all projects in order to reduce or eliminate erosion and sedimentation. Potential impacts to wetlands are thoroughly identified in the EIS, Tables 4-32 through 4-38 and in the wetland and riparian areas discussion, Section 4.3.2.4.

WAT-DC-4-1 The bike trail appears to cross the intermittent stream in Honeycomb Canyon approximately nine times. We could not find any statement regarding whether there are wetland impacts associated with these crossings. Further, this reviewer is unfamiliar with the topography of the Canyon. Would it be possible for bikers to pioneer trails along the creek channel or adjacent to the channel, thereby indirectly effecting wetland resources?

Response: Small areas containing wetland vegetation indicator species were identified in Honeycomb Canyon near the Woodlawn Mine, between 9,100 and 9,200 feet. However, these areas were not subject to a jurisdictional wetland delineation. If the final trail plan cannot avoid passing through wetland areas or crossing surface water, mitigation measure WET-6 stipulates boardwalks and bridges must be built. Mitigation measures REC-1 and REC-2, SWQ-4, stipulate implementation of construction standards, education efforts, trail signage, and a trail monitoring plan in order to alleviate impacts from building new trails and the resultant increase in mountain bike use. See also Response to Comment REC-DC-4-2 for a discussion of potential trail pioneering.

GENERAL

WAT-DC-236-1 How can a corporation (Intrawest) expand so vastly without taking more than their share of water while we, the citizens of the valley conserve, particularly this year, so we may have the beauty of this wonderful place to enjoy.

Response: Thank you for your comment. Please see Response to Comment WAT-DC-206-1.

WAT-DC-39-1 Another concern is that construction of the alpine slide would have a negative impact on water quality. This project represents a moderate to high potential for sedimentation. (DEIS Chapter 4). The proposed slide crosses Mill F South Fork Creek 3 times. A total of 420 feet of the proposed slide would be within 50 feet of the creek.

Response: Please see Response to Comment WAT-DC-167-1.

WAT-DC-62-2 Watershed concerns have always revolved about carrying capacities in the local canyons. On your arrival in Salt Lake one of the first things you mentioned was the need to define carrying capacities in the local canyons. In my perusal of the Solitude DEIS nowhere do I see canyon carrying capacity numbers.

Response: The idea of establishing canyon carrying capacity numbers has been discussed as an option for managing human use of the Tri-Canyon area. However, the idea has not been further developed for reasons such as the inability to equally weigh competing uses by visitors to the
canyons. Since an established protocol for applying carrying capacities has not yet been developed it was not used in this analysis.

WAT-DC-87-1 Most importantly, the lighting will be another threat to the watershed. More people will be using the Nordic track and more pollution will result. We can't even have dogs in the canyon but we will allow the area at the top of the canyon to be overdeveloped and overused adding pollution and threatening the watershed.

Response: Thank you for your comments. Other projects within the central Wasatch Mountains that may compound any effects from increased development at Solitude are outlined in Section 4.1.1 of the EIS. As this question pertains to water quality, monitoring will continue and water quality standards must be met. Additional information pertaining to coliform testing is included in the EIS, Section 3.2.1.2.

WAT-DC-5-1 Fleet Street And Fluid Drive Ground Modifications To Ravine: However FCOZ also requires that “To the maximum extent feasible, development shall preserve the natural surface drainage pattern unique to each site as a result of topography and vegetation. . . . Natural drainage patterns may be modified on site only if the applicant shows that there will be no significant adverse environmental impacts on site or on adjacent properties. . . . If natural drainage patterns are modified, appropriate stabilization techniques shall be employed.” [Foothills and Canyons Overlay Zone Ordinance; 19.73.080]

Response: Thank you for your comment. The EIS now includes this ordinance in Section 4.2.1.2, so as to include it in the trail improvement plans. The mitigation measures involved with reducing impacts to soils and water quality and vegetation, applicable to these projects, are discussed in Sections 2.6.8 and 2.6.11 of the EIS.

WAT-DC-6-9 Many of the projects (including the two new lifts mentioned previously) have been assigned a high-risk level from CDA analysis. However, concerns about sedimentation in moderate – to high-risk areas are dismissed with the statement that “this impact can be alleviated through implementation of conservation management practices and mitigation measures” (p. 4-68). The DEIS includes several pages of mitigation measures (beginning on p. 2-81) that must be implemented during construction and revegetation. . . . How successful have such mitigation measures been in the past in this high alpine environment? How many years of soil erosion could occur in areas that are difficult to revegetate? Even though long-term impacts on water quality due to sedimentation are stated to be minimal, what assumptions are made to arrive at that conclusion? . . . How can the Forest Service guarantee that the mitigation measures will be faithfully adhered to, given the limited oversight resources available?

Response: Mitigation measures such as those cited in the above comment are industry standards that have proven to greatly reduce impacts associated with sediment transfer. Other ways to alleviate impacts is to stagger the timing of construction projects, allow a season of rest between higher risk projects, and perform construction activities after snowmelt has ended and the site is dry (see mitigation measures SWQ-5 and SWQ-7 in the EIS).

It is true that some areas proposed for development projects at Solitude consist of steep, rocky slopes with shallow soils and sparse vegetation. These areas do take longer to successfully re-
vegetate, and this consequence must be considered during decision-making. Mitigation measure VEG-4 stipulates that re-vegetated areas must be resurveyed every year. After five years, if re-vegetation efforts do not meet Forest Service standards, the site must be reevaluated and re-vegetated with new methods. Forest Service monitoring of mitigation efforts does occur. Specific treatments are recommended for sensitive areas, such as high-alpine environments. For example, mitigation practices at the Baby Thunder project at Snowbird were reviewed on-site. Re-vegetation efforts involving native seed and mulching were successful within two years of project completion. We are committed to monitoring efforts as stated in the EIS.

It is safe to assume that impacts to water quality by sediment transport diminish over time as sites are re-vegetated. Soil erosion has the highest probability of occurring during the first two years.

WAT-DC-6-10 The proposed mountain bike trail in Honeycomb Canyon will cross the creek nine times (p. 4-17). Installation of bridges and riprap is suggested for these crossings. Bridges are the preferred alternative, as riprap tends to straighten out naturally meandering creek channels and ruin the natural look of the stream banks.

Response: Thank you for your comment. Mitigation measure WET-6 stipulates that boardwalks and bridges must be built if a trail crosses wetland areas or surface water.

WAT-DC-6-16 The proposed expansion of this [Last Chance Mining Camp] building far exceeds the square footage necessary to provide superior skier services. In addition, an increased footprint (roof, deck, roadway, and walkways) absorbs no water and causes an incremental loss of watershed value. Use of salt and chemicals on walkways and parking lots will further contaminate the watershed.

Response: The purpose and need for facility expansion at Solitude is outlined in Section 1.3 of the EIS. All action alternatives include the development of a drainage system, to be buried in the existing road network, and a new sedimentation pond in the base area to control surface runoff and reduce impacts to Big Cottonwood Creek. Expansion plans for Last Chance Mining Camp have been altered in Alternative 3 of the EIS in order to address concerns raised by near-resort residents.

WAT-DC-7-2 Look at Cumulative effects compounded by the private land developments as well as the proposed expansion of parking and all other developments that will potentially impair the streams. Any impacts to waters of the United States including wetlands requires permitting by the Army Corp of Engineers. Any such activity is disfavored by the Clean Water Act.

Response: The cumulative effects of other development in the canyons east of Salt Lake City has been discussed in Section 4.1.1 of the EIS and at the end of each specific affected resource section. For example, the cumulative effects to water quantity are discussed in Section 4.2.1.3 of the EIS.
As stated in the EIS, Section 4.3.2.4, decisions regarding wetland areas require permitting by the Army Corp of Engineers. Table 1-2 (Section 1.7) lists the agencies involved in decision-making and any required permits.

P. WETLAND AND RIPARIAN AREAS

WET-DC-2-1 The Utah Division of Wildlife Resources is concerned that the Proposed Action (Alternative 2) will result in impacts to 3.3 acres of wetlands and riparian areas, which is the largest such impact of all six alternatives presented and analyzed in the DEIS.

Until avoidance of impacts to wetland and riparian habitats is truly considered, we do not feel that it is appropriate to discuss mitigation for such impacts. We strongly recommend that the Wasatch-Cache National Forest evaluate all alternatives with the goal of avoiding impacts to wetlands and riparian areas.

Response: Mitigation measure WET-2, which requires that all wetland impacts be avoided or minimized to the maximum extent possible, is included in the EIS in Section 2.6.13. Further, the design of the various elements that comprise the Proposed Action and the other alternatives were evaluated to ensure that the potential impacts to wetlands were minimized. For most elements that would produce wetland impacts, the design criteria did not allow complete avoidance of impacts. In these cases, the option to not build the element was included in one or more of the alternatives. See also the Response to Comment ALT-DC-2-1.

WET-DC-6-1 The impact to wetland and riparian areas is estimated to be 3.3 acres for the actions proposed by Solitude. The elimination of several unnecessary projects, including (1) the Redman lift and trail and (2) the weir and pump house needed for withdrawing water from Big Cottonwood Creek reduces by 2.0 acres the area of affected wetlands. Additionally, simply requiring Solitude to reroute utility lines to the road corridor for burial rather than burying them in a wetland area would save 0.2 acre of wetland near Big Cottonwood Creek.

Response: Alternatives 1, 4, 5, and 6 would not allow the Redman lift and trail or the weir and pump house, thus eliminating the wetland impacts associated with these elements. These alternatives would also route the utility line to the road and avoid the wetland impact associated with burying it near Big Cottonwood Creek.

Q. WILDLIFE

NIGHT LIGHTING

WL-DC-37-1 The Draft Environmental Impact Statement for Solitude Ski Resort’s Master Development Plan fails to adequately address the affect of night lighting on animals and plants. Simply stating that night lighting and associated activity could cause wildlife to leave important winter habitat or otherwise negatively affect nocturnal behavior is not enough. The DEIS needs to state why wildlife will leave important winter habitat and how it will negatively affect their nocturnal behavior. Some areas that should be considered include the hormonal affect night lighting will have on plants and the influence of positive and negative phototropism. Animal rhythms should be addressed as changes in light determine how much animal’s pineal
glands secret melatonin. Melatonin affects the circadian rhythms and may result in depressed immune systems of the animals. This in turn makes mammals more sensitive to disease. More noise from people using the lighted trails will also stress the animals and negatively affect their immune system.

**Response:** A discussion of the effects of night lighting on wildlife can be found in Section 4.3.3.2 of the EIS. The statement about night lighting mentioned in the above comment came from an issue statement resulting from public and agency scoping efforts. This statement was general in context and was intended to disclose a potential environmental concern rather than summarize the finding of our analysis. This statement has been revised in Chapters 1 and 4 of the EIS to more clearly address this issue.

Although there is no night lighting currently available on lifts and trails at Solitude, there are lights in the village base area in the parking lot and associated skier support facilities, overnight facilities, and other commercial structures. In addition, 18 ski runs (approximately 200 acres) are illuminated at the neighboring Brighton ski area. Night lighting proposed for Solitude would be concentrated at the base area on selected Nordic trails and lifts and can be considered an incremental increase in the existing night lighting of the canyon. We are not aware of studies that specifically quantify the impacts of night lighting on wildlife, thus it is difficult to predict exact responses. It is generally believed that the incremental effects of adding night lighting to an area that already contains some degree of illumination is small. It is predicted that nocturnal wildlife species will either leave the general area of illumination or seek out relatively dark areas during the period when the lights are on, thereby restricting the movements of the crepuscular and nocturnal species within the ski area. Because the area proposed for illumination is small in comparison to the non-illuminated areas within the permit area, we expect that there will be adequate non-illuminated areas for nocturnal wildlife to utilize during the hours of night lighting and that the impact to wildlife to be small.

Although we agree that night lighting could potentially change the duration of melatonin secretion in animals, we are unaware of any studies that specifically address the response of wildlife immune systems to changes in levels of melatonin. The proposed hours of night lighting operations are from 5:00 to 10:00 p.m. It is predicted that wildlife movement patterns will be modified because of the hours of nighttime illumination and the associated increase in human activity. However, since wildlife species can move to non-illuminated portions of the project area, and because the hours of illumination encompass only a portion of the regularly dark, non-illuminated hours, the impact to wildlife species’ immune systems is expected to be negligible. Please refer to Response to Comment VEG-DC-37-1 for a discussion of the impact of night lighting on plants.

**Response:** A discussion of the effects of night lighting on wildlife can be found in Section 4.3.3.2 of the EIS. See also Response to Comment WL-DC-50-1, above.
WL-DC-87-1 The lighting will disturb the wildlife. It is clearly not natural and the animals will again be forced to move.

**Response:** A discussion of the effects of night lighting on wildlife can be found in Section 4.3.3.2 of the EIS. See also Response to Comment WL-DC-50-1, above.

WL-DC-18-1 Night lighting – Night lighting is disorienting to wildlife and disrupts the natural systems in forest communities and should be banned.

**Response:** A discussion of the effects of night lighting can be found in Section 4.3.3.2 of the EIS. See also Response to Comment WL-DC-50-1, above.

WL-DC-3-3 Night lighting should not be permitted because of potential behavioral disturbance to the following species: Canada lynx (*Lynx canadensis*), a federally listed species, listed as threatened; wolverine (*Gulo gulo*), a State of Utah threatened species and Forest Service listed sensitive species; and the golden eagle (*Aquila chrysaetos*) and goshawk (*Accipiter gentilis*), year round residents in Big Cottonwood canyon.

**Response:** A discussion of the effects of night lighting on wildlife can be found in Section 4.3.3.2 of the EIS and the goshawk is specifically addressed in this section. Although lynx and wolverine are not specifically addressed, the EIS does mention the possibility that additional trail lighting could have the effect of fragmenting habitat. Results of habitat fragmentation could cause the avoidance of areas lit for skiing by these species, particularly if the lighting is combined with an increase in human activity. Lynx, wolverine, goshawks, and golden eagles could be indirectly impacted by potential impacts of lighting to their prey species. However, as mentioned in the EIS, the impact of artificial lighting on predator-prey interactions is merely speculative. Further discussion on the effects of night lighting on wildlife can be found in Response to Comment WL-DC-37-1.

WL-DC-6-12 The DEIS fails to adequately address the effect of night lighting on animals and plants. Simply stating that night lighting and associated activity could cause wildlife to leave important winter habitat or otherwise negatively affect nocturnal behavior is not enough. The DEIS should state why wildlife will leave important habitat and how the night lighting will negatively affect their nocturnal behavior. Some considerations that should be analyzed are the hormonal effect night lighting will have on plants and the influence of positive and negative phototropism. Animal rhythms should be addressed, as changes in light determine how much an animal’s pineal glands secret melatonin. Melatonin affects circadian rhythms and may result in depressed immune systems. This in turn makes mammals more sensitive to disease. More noise from people using the lighted trails will also stress the animals and negatively affect their immune systems.

**Response:** Please refer to Response to Comment WL-DC-37-1 for a discussion of the impact of night lighting on wildlife. Please refer to Response to Comment VEG-DC-37-1 for a discussion of the impact of night lighting on plants. See also Response to Comment VEG-DC-6-12.
WILDLIFE SURVEY

WL-DC-19-2  A comprehensive survey and analysis of impacts on all wildlife and plants at Solitude is needed before any expansion plans are approved. The surveys outlined in the DEIS are limited in scope and do not even cover all sensitive plants and animals. For example, even though there are sensitive bats, shrews, snakes and pika in the area, no survey was undertaken of these species. The plant survey by Intermountain Ecosystems only included 16 species of plants and did not cover the high ridgelines in Honeycomb Comb or else they surely would have found Lesquerella utahensis and L. garrettii within the Solitude boundaries as I have. In addition, the sensitive species Draba densifolia was not even in the Intermountain Ecosystems survey. After a comprehensive survey and analysis of all species at Solitude is performed, a follow up system of monitoring needs to be put in place to ensure the long-term viability of all species at Solitude.

Response: The wildlife surveys outlined in the EIS cover all species identified as management indicator species (MIS) in the Forest Plan, as threatened or endangered by the Fish and Wildlife Service, as sensitive by the Regional Forester, and as having the potential to be added to the R4 Forest Service sensitive list in the next revision. Species considered sensitive by other groups or agencies were not discussed, although many of them can be assumed to be present based on the presence of a MIS (refer to Chapter 3 of the EIS, Section 4.3.3.1 for information on MIS). Because of the extensive resources required to conduct surveys, it was not feasible to survey and assess the impacts on all species potentially occurring in the project area. Therefore, MIS were chosen as a tool in this analysis because they provide a way to address numerous species that utilize a given habitat type, including species that do not receive special management status. In addition, a list of wildlife species that are known to occur or have a high probability of occurring in the project area was compiled for the major plant communities and wetland/riparian areas in the project area and suffices for the purposes of this project. The species list can be found in Appendix G2 of the EIS. By managing for MIS and TES species, additional species that utilize the same ecosystems are indirectly managed for as well.

Implementation of a monitoring program to ensure the long-term viability for all wildlife species at Solitude would be an extremely costly and complex endeavor and is not within the scope of this project. However, numerous mitigation measures and management requirements would be implemented to minimize impacts to wildlife species and ensure the protection of important wildlife habitat. A description of these measures can be found in Section 2.6.14 of the EIS. Please refer to Response to Comment VEG-DC-19-2 for a discussion of night-lighting impacts to plants.

WL-DC-208-1  This comment is regarding sensitive species in the proposed area of development. While skiing last spring on Twin Lakes are near figure 8 hill upper twin lakes we heard croaking by frogs or toads. I was with Keith Clapier listed on DEIS as biological assessor. He attempted to find the source but was unable. However, study of habits of boreal toad leads us to believe that these are present in Twin Lakes area. I have also seen Goshawk in the Redman area.

Response: Boreal toads could potentially occur in the Solitude project area, as this species has been found in low numbers in similar habitats at Snowbird (USDA-FS 2001). However, surveys
for boreal toads at Solitude failed to locate any individuals. Suitable habitat for this species was identified only at Mill F South Fork drainage in riparian/wetland areas and adjacent spruce/fir and aspen forests; the Twin Lakes area was not identified as suitable.

Results of surveys conducted for northern goshawks in the project area indicate that the only known pair nests near Solitude in the upper portion of Big Cottonwood Canyon (USDA-FS 2001). Therefore, the individual observed in the Redman area was probably from this pair and has been addressed.

WL-DC-6-1a The Solitude DEIS in Appendix G-2 delineates eight species of bats that have a high probability of existing in upper Big Cottonwood Canyon. The DEIS also states that potential bat habitat exists within the Solitude boundaries (see p. 3-38). Two bats are discussed as sensitive species on p. 3-42: the Spotted Bat, *Euderma maculatum*, and Townsend’s Big Eared Bat, *Corynorhinchus townsendii* . . . While these bats were discussed in the DEIS, no reference is made to any surveys that were conducted at Solitude, or to the impact of the proposed improvements on bats at Solitude.

**Response:** Appendix G-2 lists eight species that have a high probability of occurring in one or more of the three major plant communities in upper Big Cottonwood Canyon. Of these eight species, only the spotted bat and Townsend’s big-eared bat are discussed because these species are Forest Sensitive Species. Surveys were not conducted for the spotted bat because of the difficulty of survey efforts (they avoid mist nests and are easily injured). Assessment for this species was based on the presence of habitat in the project area. However, it is highly unlikely that this species will be present in the permit area as only one individual has ever been located in Salt Lake County, and it was in an urban environment (Williams 2001). Surveys were not conducted for the big-eared bat but, since the habitat exists in the project area and individuals have been found in other locations on the Wasatch-Cache National Forest, it can be presumed that this species is likely present. Surveys were not conducted for the additional six species potentially occurring in the area for the reasons mentioned in Response to Comment WL-DC-19-2. A brief assessment of the project on bats can be found in Section 4.3.3.4 of the EIS. The interpretation of this assessment is that no impacts to bat roost sites or hibernacula are projected to occur as a result of the proposed development, thus the development projects should have little effect on bat species.

WL-DC-6-2 Another mammal listed in Appendix G-2 with a high probability of existing in upper Big Cottonwood is the dwarf shrew, *Sorex namus*. No mention is made in the DEIS about surveys for the dwarf shrew and impacts to this rare species are not analyzed.

**Response:** No surveys or analyses were conducted for the dwarf shrew. Our rationale for this is discussed in Response to Comment WL-DC-19-2. Although potential habitat for this species is present in the project area, the dwarf shrew is only known to occur in the Uinta Mountains in northern Utah and the Abajo Mountains in southeastern Utah (DWR 1997). It is mentioned in Section 4.3.3.2 of the EIS, however, that shrews, and other small mammal species, would potentially be impacted by proposed night lighting.

WL-DC-6-3 The Solitude DEIS in Appendix G lists wildlife species of riparian areas that can potentially occur at Solitude. Among the list are the Utah mountain kingsnake, *Lampropeltis pyromelana*, and the Utah milk snake, *Lampropeltis triangulum*. Another snake,
the smooth green snake, *Opheodrys vernalis*, is known from mountain wetlands in the Wasatch Range. While the viability of all three species is of concern, the DEIS does not mention any of them in the main body of the text, nor is any mention made of any survey for any snakes whatsoever or potential impact to them from the proposed changes at Solitude.

**Response:** No surveys or analyses were conducted for snakes. Our rationale for this is discussed in Response to Comment WL-DC-19-2. Although potential habitat for the smooth green snake is present in the project area, this species is not known to occur in Salt Lake County (DWR 1997).

WL-DC-6-4 Of particular concern is the impact Solitude’s proposed changes will have on the boreal toad (*Bufo boreas boreas*) and its habitat. Historically, this toad was found near Silver Lake in Big Cottonwood Canyon as well as nine other locations from Parley’s Canyon to Alta.

While surveys at Solitude have failed to find the boreal toad, there is ample breeding habitat there for the toad and it is well within the range of those toads found at Snowbird. Measures should be taken to ensure that Solitude’s riparian areas are preserved and protected for the boreal toad and other sensitive riparian species.

**Response:** While boreal toads may occupy a variety of habitats in the non-breeding season, they require aquatic and wetland habitats for reproduction. Survey efforts were focused only on wetland/water features within the permit area that had the potential to be disturbed by the proposed projects. These included Lake Solitude, Milk Pond, and a series of detention ponds located along Mill F South Fork below Milk Pond. No boreal toads or egg masses were detected within these survey locations. Although it is possible that toads could occur in other suitable habitat adjacent to the permit area such as Silver Lake, the proposed project is not projected to impact these areas.

The concern regarding boreal toads would be potential impacts to the quality and quantity of breeding habitat that could result from implementation of the proposed projects. Losses to habitat from individual projects and cumulative projects would be expected from some of the proposed projects as is stated in Sections 4.3.3.2 and 4.3.3.4 of the EIS. Potential negative impacts to water quality and wetland/riparian habitats by proposed development projects will be reduced on NFS lands through the implementation of Conservation Management Practices (see Appendix C of the EIS), and mitigation measures (refer to Section 2.6). These practices and measures would be required on public land but only recommended on private land, as private lands are not within the jurisdiction of the Forest Service. However, private land is required to abide by numerous mitigation measures, management practices, and permit requirements that are regulated at the federal, state, and county levels.

WL-DC-6-5 Another small mammal that will be impacted by the changes at Solitude is the Wasatch pika, *Ochotona princeps wasatchensis*.

The DEIS states on pp. 4-99 and 4-100 that the bike trail through Honeycomb Canyon could physically and effectively fragment habitat with increased intrusion of people. Furthermore, avalanche control will be increased in areas accessed by the Honeycomb return lift.
(DEIS p.2-24). This will further fragment the environment and negatively impact pika. There is no analysis in the DEIS of the impact the proposed improvements at Solitude will have upon sensitive pika populations.

**Response:** Since pika are not a designated Forest Service sensitive species, they were not analyzed in the EIS. We do not expect that the bike trail will impact the rocky, pika habitat in the Honeycomb Canyon. Although a biker may temporarily disturb pika individuals, these disturbances would be short-lived and infrequent. Since avalanche control is an existing condition, and has been taking place at solitude since the resort opened, no impacts to pika are projected from this activity. Please refer to Response to Comment WL-DC-19-1 for further discussion of avalanche control.

**WL-DC-6-6** American pine martens, *Martes americana*, are listed in the DEIS (p. G-10) as having a high probability of occurring in upper Big Cottonwood Canyon. A pine marten was recently spotted just west of the Albion Basin campground at 9,500 feet. The DEIS does not talk about any survey at Solitude for the marten that was completed and further analysis of the impacts of improvements at Solitude on the marten are not made.

**Response:** Although habitat for martens does exist in the project area (USDI-NBS 1997), historic landscape changes in Big Cottonwood Canyon have reduced the suitability of the area and, consequently, it is considered of limited value. No surveys were conducted in the project area and there are no recent records of pine marten. An analysis of the potential impacts on pine marten and its habitat can be found in Section 4.4.3.2 of the EIS in the discussion of ski lifts and night lighting.

**WL-DC-6-7** The 1997 Utah Gap Analysis for predicted habitat, shows upper Big and Little Cottonwood Canyons as “critical value habitat” for the lynx (USDI-NBS 1997). The DEIS should analyze the impact to lynx habitat and should contain measures to prevent and mitigate those impacts.

**Response:** Analysis of potential impacts to lynx habitat can be found in Sections 4.3.3.2 and 4.3.3.4 of the EIS. Impacts have been further analyzed in a Biological Assessment for this project. There would be no direct effects to Canada lynx because this species is not known to and has not historically been known to inhabit areas within Salt Lake County. Indirect effects to lynx habitat could result from the proposed forest stand thinning in potentially suitable denning habitat identified on the east slope of Honeycomb Canyon. This affect would be minimized, however, since this habitat is isolated from other suitable lynx habitat in the Central Wasatch Mountains. It would be further minimized by the implementation of mitigation measure WLF-3 (Section 2.6.14 of the EIS) which ensures the maintenance of snags and down woody material in the forest. Forest thinning in the canyon could also result in indirect effects to snowshoe hare, the lynx’s primary prey. Forest management and recreational activities would facilitate increased skier use and could lead to the displacement of hares from this habitat. The watershed would, however, retain extensive amounts of suitable hare habitat following this action, and a region-wide decline in hare numbers would be unlikely to ensue.
Landscape-level habitat suitability for the threatened Canada lynx is likely to continue to decline as public and private land development and resulting landscape fragmentation and habitat loss increases.

**WL-DC-6-7a**  
Williamson’s sapsucker, *Sphyrapicus thyroideus nataliae*, is listed on p. G-15 of the DEIS as occurring in upper Big Cottonwood Canyon... No mention of the sapsucker is made in the main body of the DEIS, no survey has been made, nor have the impacts of the Solitude changes been analyzed.

**Response:** Williamson’s sapsuckers utilize aspen and spruce/fir community types and thus have a high probability of occurrence within the upper Big Cottonwood Canyon. This species has no US Fish and Wildlife Service or Forest Service status, thus was not surveyed for or analyzed in the EIS. Please refer to Response to Comment WL-DC-19-2 for a discussion of species that were surveyed for and analyzed.

**WL-DC-6-8**  
The DEIS acknowledges that a pair of northern goshawks, *Accipiter gentilis*, is known to breed in the vicinity of Solitude and, in fact, the DEIS (p. 2-88) details mitigation measures needed to prevent disturbance of the Goshawks. The reference in Chapter 7 of the DEIS lists the USDA-FS 2000 “Utah Northern Goshawk Project Decision Notice,” which amended the Wasatch-Cache Forest Plan, and specific guidelines, standards and management direction were given in regards to goshawk treatment. The Forest Plan Amendment should be acknowledged in the main text of the DEIS and the specifications therein carried out. These requirements go beyond the goshawk mitigation measures already in the DEIS.

**Response:** The results of the Decision Notice, Finding of No Significant Impact, and Non-significant Amendment of the Forest Plans in Utah for the Utah Northern Goshawk Project (USDA-FS 2000) does mandate an amendment to the Forest Plan for Wasatch-Cache National Forest. However, the management direction of the Utah Northern Goshawk Project EA (USDA-FS 1999a) “does not apply to areas allocated under existing special use permits (includes ski resorts) which allow vegetative disturbance or treatments (vegetation will be managed to meet the intent of the permit)” In these areas, current forest plan direction will still apply. However, when the direction adopted for management of goshawk habitat through the amendment does not conflict with the primary use in the exemption area, it will be applied.

Discussion of the Forest Plan amendment has been added to the EIS. Since the Solitude SUP area is exempt from the management directions of the EA, Solitude is not required to carry out the new guidelines as specified in this amendment. However, as discussed in the analysis section of the EIS (Section 4.3.3), specific projects, such as the creation of the New Trail and an alpine slide would cause fragmentation of existing goshawk habitat. Although the creation of the New Trail is consistent with the primary use of the SUP, the consistency with this use of a summer recreational activity, such as the proposed alpine slide is arguable.

**WL-DC-6-10**  
What is really called for is a complete survey of all species of wildlife, birds, fish and plants at Solitude, as well as an ongoing monitoring plan, in order to ensure that no species is left out and the impacts to all species from Solitude’s changes are analyzed to insure the continued viability of all species and compliance with Forest Service policies.
Response: This comment has been addressed in Response to Comment WL-DC-19-2. Please refer to this response. Please refer to Response to Comment VEG-DC-19-2 for a discussion of plant surveys. See also Response to Comment VEG-DC-6-11.

BIODIVERSITY

WL-DC-167-1 The development will affect the bio-diversity of the area. Clearing trails, installing chairlift towers, and the building of service roads required to construct chairlifts and the alpine slide will affect the soil, plant communities, mixed coniferous/deciduous forest community, and wetlands in the area. Although there are certainly more species in the following categories, I have personally confirmed the presence of 26 mammals, including Moose, Beaver, and Osprey, many species of migratory birds, many of whom play an ecological role in wintering areas in as far away as Argentina and Mexico. The developments would place a disproportionate amount of pressure on the Beaver, who has already been systematically removed because of undesirable impacts on private land. As far as I know, there is only one beaver left in the Silver Lake area, new developments on adjacent lands will increase the chances the beaver's dams and corresponding wetlands will conflict with desired human uses.

Response: A discussion of the projected impacts on biodiversity can be found in Section 4.3.4 of the EIS. We agree that the indirect and combined effects of the development projects will impact the biodiversity of the area and that construction activities associated with the proposed development plan would affect the soil, specific plant communities, mixed coniferous/deciduous forest community, and wetlands in the area. Impacts to plant communities and wetlands will be mitigated to some extent by re-vegetating ground-disturbed areas with native seed mixes and trees and by implementing a monitoring and weed management program as described in Sections 2.6.11 and 2.6.13 of the EIS.

An estimated 300 species of wildlife and fish inhabit the Wasatch-Cache National Forest, a large proportion of which are expected to inhabit the project area, as described in Section 3.3.3 of the EIS. Beaver have historically occurred in the Silver Lake area as mentioned in your comments. We know of no other locations of beaver use within the project area, and only a small portion of the project area contains suitable habitat. It is possible that increased development on adjacent lands could increase conflicts of beaver with humans. The Department of Wildlife Resources manages the resolution of these conflicts. Development around Silver Lake is not projected as a direct or indirect effect of this project.

DEVELOPMENT IMPACTS

WL-DC-112-1 We have concerns about expanded bike trails in the canyon. Biking, especially downhill, must have a negative impact on the wildlife. The human presence here certainly impacts deer and moose and biking will have riders suddenly appearing in much more of their presently “safe and undisturbed” areas.

Response: As discussed in Section 4.3.3.2 of the EIS, increases in human activity in the Honeycomb Canyon would be expected with the addition of new bike trails and could disrupt animal movements and cause displacement of wildlife species that are sensitive to human presence. However, the increased human use would be dispersed throughout the trail network,
thus reducing the intensity of disturbance to wildlife. In addition, the more tolerant wildlife species could become desensitized to biking activities and therefore would not avoid areas used for recreation, but instead would stay put until the disturbance dissipated. It is possible that the disturbance created by bikers would be less disruptive to animal movement patterns and behavior than hiking activities. The rationale behind this statement is that bikers would be moving quickly through an area, whereas hikers would persist in an area for a longer period and could be perceived by an animal as a predator, thus causing the animal to seek shelter or flee the area. As this argument is speculative, no revisions to the EIS on this subject are warranted.

WL-DC-149-1

Enough really is enough, please stop the developers from ruining our canyons, destroying the natural habitat for wildlife!

Response: Thank you for your comment.

WL-DC-178-1

On a recent hike at Solitude, we encountered an enormous bullmoose. I doubt if that moose can coexist with an alpine slide!

Response: Please refer to Section 4.3.3.2 and Section 4.3.4.2 of the EIS for a discussion of summer recreation and the potential impacts of an alpine slide.

WL-DC-19-1

Avalanche control will have to be increased in the canyon as a result of the increased human presence and this will have a negative impact upon the rare and sensitive plants and animals that use the canyon for refuge.

Response: Avalanche control has been conducted within the ski area ever since the resort has been in operation. The frequency and intensity of avalanche control activities would increase somewhat in areas accessed by the Honeycomb Return lift and areas above the Sol-Bright trail, but no new avalanche control areas would be established. We are not aware of any research that has been conducted on the impacts of avalanche control on wildlife. Naturally occurring avalanches have been known occasionally to be responsibly for the death of animals such as bear, wolf, and mountain goat. Use of explosives could slightly increase the risk that goats or other wildlife could be caught in an artificially triggered avalanche. There also could be impacts to subniveal species due to compression of snow, but impacts would be variable depending on the type and intensity of avalanche. Avalanche control activities create a short-term noise disturbance that could potentially impact golden eagles in the early nesting season, but impacts would be short-lived, specific to individuals, and would not impact the population. Since avalanche control is an existing condition at Solitude, and established avalanche chutes are present, we do not expect any changes to the potentially occurring impacts on wildlife. Because no changes to substantive impacts are expected, this issue is not further addressed in the EIS. Please refer to Response to Comment VEG-DC-19-1 for a discussion of potential impacts of avalanches on plant communities.

WL-DC-32-1

We were in the canyon yesterday and observed a mother moose and two babies as well as a coyote and deer. The word solitude, based on my understanding of it, describes where moose and other wildlife would be able to live peacefully and unthreatened. Is the private and public land that Solitude uses such a place now and what will it be like in the future?
**Response:** Descriptions of the affected environment and predicted direct, indirect, and cumulative impacts of the proposed action on wildlife can be found in Section 3.3.3 and Section 4.3.3 of the EIS, respectively.

WL-DC-3-2 Roads and other facilities should be designed to minimize fragmentation of habitat for flammulated owl, northern goshawk, and other interior forest species.

**Response:** Fragmentation would result from the removal of forest vegetation in specific projects of all alternatives and was considered to be an unavoidable adverse effect. Consequently, habitat for forest interior species would be impacted. The impacts of fragmentation associated with specific elements of the proposal are discussed in Sections 4.3.2, 4.3.3, 4.3.4, and 4.5.6 of the EIS. These impacts were a consideration in the formulation of alternatives that alter or eliminate such elements. See also Response to Comments WL-DC-4-1, WL-DC-6-7, and WL-DC-6-8 for further discussion of the impacts of forest fragmentation to wildlife.

WL-DC-4-1 The public and the decision maker would benefit from some additional information in the EIS regarding the potential for wildlife impacts in Honeycomb Canyon. The DEIS briefly discusses the potential for goshawk impacts (p. 4-105 and 4-115) but no other species are mentioned. Do wildlife values exist in the Canyon that are not discussed in the DEIS such as ungulate calving and predator and/or ungulate security cover? If the Canyon does supply these habitat values, would they be affected by the proposed trail. Finally, are habitat values such as security cover in limited supply in the BCC?

**Response:** A description of the overall value of Honeycomb Canyon to wildlife is included in Section 3.3.3.1 of the EIS. In this discussion it is stated that the dense spruce/fir stand provides thermal/hiding cover for big game. This forested area could also be used for fawning and rearing requirements of moose and deer. The dense forested stands also provide cover for carnivore species such as the lynx, as discussed in Section 3.3.3.2. A diversity of habitats and associated values to wildlife are available in this canyon, thus only the primary values were discussed in the DEIS and no additions were made to the EIS.

The potential impacts to wildlife and riparian habitat in Honeycomb Canyon are discussed in various sections of the EIS. For example, potential impacts to golden eagles are discussed in Section 4.3.3.1. Potential impacts to wildlife resulting from the installation of the Honeycomb lift and trail are described in terms of habitat impacts and wildlife displacement (see Section 4.3.2.2). In addition, potential benefits of forest thinning to lynx and hare habitat in the Honeycomb Canyon area west of Challenger are addressed in Section 4.3.2.2. Potential impacts to wildlife discussed in the EIS resulting from the creation of the mountain bike trail only specifically address goshawks. However, it is stated in Section 4.3.3.2 of the EIS that the recreational activity on the trail would likely decrease the canyon’s appeal to species that are sensitive to human presence. Further discussion of potential impacts of the bike trail can be found in Response to Comments WL-DC-112-1 and WL-DC-6-14.

A general overview and description of the value of Big Cottonwood Canyon to wildlife is included in Section 3.3.3 of the EIS. Extensive undisturbed forested areas suitable for species that require large home ranges no longer exist in the canyon, or the greater Central Wasatch. These habitats are not likely to develop over time, due to the existence of roads, the development
of second homes on private lands, continued operations of the ski areas, and the continued demand for recreational opportunities on the Forest in general. However, sufficient suitable forested habitat and associated cover value currently exists in the upper portion of the canyon for the northern goshawk and other wildlife species that are dependent on mature forest habitats. These habitats are most at risk from habitat loss and forest fragmentation that would result from further developments within the canyon. Natural processes such as fire or insect infestations could also occur and result in a reduction of habitat.

**WL-DC-6-1** Pulses of pollution from roadway and parking lot runoff (oil, fuel, antifreeze, sand, salt, mud) occur during snowmelt and may cause very high temporary concentrations of pollutants in Big Cottonwood Creek immediately below Solitude. The effect of these short-term, localized, high concentrations of pollutants may be very damaging to riparian and aquatic flora and fauna during times when their rapid growth is critical. The DEIS must acknowledge that average pollution levels, measured after much dilution at the bottom of Big Cottonwood Creek, may have little bearing on the actual effect of the pollution on natural resources near the pollution source. Monitoring programs are recommended.

**Response:** As stated in Response to Comment WAT-DC-6-11, runoff from roadways and parking lots is prevented from entering Big Cottonwood Creek by the use of detention basins, berms, sediment entrapment basins, and the naturally occurring vegetative buffer. Please refer to this comment response for further discussion of runoff prevention measures. Since Big Cottonwood Creek does not receive an influx of localized, high concentration pollutants, and since implementation of the proposed projects would change this status, impacts to the riparian and aquatic flora and fauna are not anticipated.

**WL-DC-6-11** The DEIS omits any solid study on noise pollution caused by traffic, the impact of increased traffic on wildlife, and future projections of traffic in Big Cottonwood Canyon that will result from population growth.

**Response:** The impacts of increased traffic on wildlife are discussed in Sections 4.3.3.4 and 4.3.3.4 of the EIS. It is projected that the increase in evening activities and associated traffic is likely to result in an increase in vehicle-wildlife collisions. Please refer to Response to Comments TRAN-DC-6-3 and NOI-DC-6-1 for a discussion of the noise pollution and future traffic projections.

**WL-DC-6-11a** The impact of increased noise and traffic on wildlife is not discussed except that construction might have a temporary impact. Increased human activities and traffic certainly affect movements of wildlife that are already finding it difficult to cross roads and other populated areas to water sources and forage. Noisy human activities such as avalanche control and snowmobiles also will affect hibernating animals. The DEIS fails to address this issue.

**Response:** We agree that increased human activities and traffic affect movements of wildlife. Please refer to the Response to Comment WL-DC-6-11 for a discussion of impacts of increased traffic on wildlife. The EIS additionally states that with increased recreational use in the Central Wasatch, direct and indirect effects to wildlife stemming simply from increased human presence and activity will increase. It is projected that increased development and recreational activities
will cause displacement of wildlife and that, over time, there will be less habitat and refuges for wildlife to move to.

Direct noise impacts to wildlife are addressed only briefly in the EIS and primarily in the context of construction activities. The impacts of avalanche control activities are addressed for the golden eagle but not for other species. There is the potential for short-term impact to wildlife species, primarily raptors, resulting from blasting, but this impact is minimized because avalanche control is an existing condition at Solitude and because it occurs predominantly outside of the raptor nesting season. See also Response to Comment WL-DC-19-1 for further discussion on potential impacts of avalanche control activities.

Indirect impacts of noise are discussed within the wildlife section of the EIS in the context of increased human presence. It is projected that increases in human activities (and associated noise) will impact species that are sensitive to human disturbance.

As stated in Section 4.2.4 of the EIS, noise from operational activities would nominally increase in the immediate area of the ski resort as a result of the proposed projects. Such activities include the lift terminals, snowmaking guns, snow groomers, and snowmobiles and typically occur at night. None of this operational machinery would raise the ambient noise levels beyond that currently experienced within the developed portion of the SUP boundary. However, expanded snowmaking and grooming would reduce the number of secluded areas that presently experience lower noise levels and thus could modify movement patterns of some nocturnal animals.

WL-DC-6-13 The building of the Honeycomb Canyon return lift would necessitate the increase in the frequency and intensity of avalanche control activities... Increasing the use of these compounds in a watershed could have negative impacts on the supply of drinking water. The explosions as well as the residue will pose a threat to the many sensitive plants and animals that have habitat in Honeycomb Canyon. The DEIS should analyze the negative effects that the increased use of nitroaromatic explosives will have on the environment, especially in Honeycomb Canyon.

Response: A discussion of the impacts of avalanche control to water quality can be found in Response to Comments WAT-DC-61-4 and WAT-DC-6-13. Past monitoring efforts in Big and Little Cottonwood Canyons have found no indication of increased nitrate concentrations due to explosive use (USDA-FS 1999). Although there is some documentation that high concentrations of nitroaromatic explosives, such as 2, 4, 6-trinitrotoluene (TNT), have toxic and mutagenic effects to many organisms, we are not aware of any research that has specifically documented the impact of snow avalanche control activities on plants and animals. However, the USGS has recently began monitoring efforts in Big and Little Cottonwood Canyon that address potential concentrations of explosive residues from snow avalanche control procedures in the snow and in sediments on lake bottoms. The objective of the USGS study is to “determine if selected chemical compounds associated with explosives used for avalanche control are transported offsite and accumulated in bottom sediments” (Naftz 2001). If compounds accumulate in bottom sediments, they would be available for uptake by biota and could potentially move through the food chain. Preliminary findings from these research efforts indicate that small concentrations of nitroaromatic residues may result from use of explosives, but would become diluted with snow.
melt and could potentially be further reduced and broken down through processes such as UV and microbiological degradation. USGS monitoring efforts will continue in the canyons, and if nitroaromatic compounds are detected in bottom materials and snow samples, subsequent studies will be proposed to evaluate the distribution of these compounds in water and biota.

Based on the preliminary findings of the USGS study, and the results from past nitrate monitoring efforts in Big and Little Cottonwood Canyons, no adverse impacts to wildlife and vegetation are projected from the use of nitroaromatic explosives for avalanche control.

WL-DC-6-14 The increased use of Honeycomb Canyon that would result from the Honeycomb return lift and the new Honeycomb bike trail would fragment the environment, DEIS (pp. 4-99 and 4-100). This would result in decreased habitat for sensitive, threatened and endangered species and could result in a loss of viability of some species such as pikas, shrews, boreal toads, goshawks, and lynx (see Wildlife Section).

Response: Increased use of Honeycomb Canyon that would result from the Honeycomb return lift and the new Honeycomb bike trail would fragment the environment, as discussed in Section 4.3.3.1 of the EIS. Habitat would decrease for lynx and goshawk, as discussed in Sections 4.3.3.2 and 4.3.4.2 of the EIS. Further discussion of the impacts to lynx can be found in Response to Comment WL-DC-6-7. Although short-term impacts to pika may result from the bike trail, loss of viability of this species is not expected. Further discussion of the pika can be found in Response to Comment WL-DC-6-5. Shrew species, like the pika, may experience short-term impacts from recreationists, but loss of viability of these mammals is not expected. Development and increased use of Honeycomb Canyon was not projected to impact the boreal toad because habitat for this species is not present in this area (see Response to Comment WL-DC-6-4).

SNOWMAKING

WL-DC-3-1 We recommend against diverting water for snowmaking from Big Cottonwood Creek which is listed as a State of Utah Class II stream. The watershed also has two State of Utah Conservation Agreement species, the Bonneville cutthroat trout (Oncorhynchus clarki utah) and spotted frog (Rana pretiosa). If the diversion is constructed, fish passage should be provided for adult and juvenile fish and the diversion should be screened to eliminate fish from entering the diversion canal or pipe.

Response: Historically, a population of Bonneville cutthroat trout occurred in Big Cottonwood Creek (Sigler and Sigler 1987), but surveys conducted in 1994 failed to locate any individuals (Cowley 1995). However, one individual trout was captured upstream, above Silver Lake at Brighton, during the summer of 1998 (personal communication with Paul Cowley, Forest Fish Biologist, 9/26/01). It is suspected that this trout came from fish stocking at Twin Lake Reservoir. Although habitat for the Columbia spotted frog exists in Big Cottonwood Creek, statewide and local surveys for this species resulted in no individuals being found (USDA-FS 1994b in USDA-FS 1999b).

Fish passage is not required based on the fish species present in the project area. However, in the design of the diversion weir, consideration should be given to what would be required to alter the
structure to make it passable to fish. This would leave open for discussion the restoration of endemic cutthroat trout to the drainage in the future. The EIS has been amended to address this issue. In addition, a mitigation measure has been added to the EIS to prevent aquatic species from entering the diversion canal or pipe (AQU-7). This mitigation measure would apply for all alternatives that include the construction of a diversion weir for snowmaking. The measure would require that a screen be installed and maintained at the entrance of the pump system.

Minimum stream flow standards for Big Cottonwood Creek have also been identified to prevent impacts to aquatic species and riparian areas during low flow periods, which occur in the winter and overlap the snowmaking season (see Section 4.2.2.1 of the EIS). Furthermore, mitigation measure AQU-4 would be required under all alternatives that include the diversion weir on Big Cottonwood Creek in order to ensure that an appropriate level of protection to aquatic resources is provided (refer to Section 2.6.2 of the EIS). Please see Response to Comment WAT-DC-3-2 for further discussion of water diversion for snowmaking.

**BIOLOGICAL EVALUATION/ASSESSMENT**

**WL-DC-6-9** The DEIS should make reference to the Biological Evaluation/Assessment which is required as a part of the NEPA process and must be completed prior to any construction. The DEIS should also note in Table 1-2 the new Salt Lake City Regulations, effective July 1, 2001, which require a permit before spraying pesticides and herbicides in Big Cottonwood Canyon for vegetation management.

**Response:** A Biological Assessment was prepared concurrent with the EIS to meet the requirements of the Endangered Species Act and a Biological Evaluation was prepared concurrent with the EIS to meet the requirements of the Forest Plan. Reference to this BA/BE has been added to the EIS. See Response to Comment VEG-DC-6-10 for an explanation of why a pesticide and herbicide permit was not included in Table 1-2.

**R. GENERAL**

**COMBINING ALPINE AND NORDIC PERMITS**

**GEN-DC-164-1** Solitude’s two permits should not be combined into a single jumbo permit. They’re two separate areas that serve two different groups. Maintaining two permits allows for greater diversity, ease of future sale of either and better control by the Forest Service.

**Response:** As described in Section 1.3 of the EIS (Table 1-1), Solitude believes that conversion of their 40 year alpine SUP and their 10 year Nordic SUP to a single 40 year SUP would improve operating efficiencies and allow long-term financing for improvements of their Nordic facilities. Their existing 10 year permit does not presently lend itself to this type of financing. It should be noted that even if we decide to the combine the permits, two mutually exclusive permit areas would be maintained for the alpine and Nordic operations. Practically speaking, the only operational change would be that two uses would be managed under a single permit with a 40 year renewal periods. Management goals and objectives and Forest Service oversight would not change.
GEN-DC-37-1 The Solitude DEIS gave a very cursory view as it relates to the combining of the Nordic and alpine permits for Solitude Ski Resort. The DEIS made no mention of how Solitude Ski Resort, which is also in the development business, would manage and use a national forest campground for the next forty years.

Response: Except for winter use for Nordic skiing, during which time camping is prohibited in this area, Solitude has no plans to manage and use a national forest campground nor would the resort entertain any proposal to do so. See also Response to Comment GEN-DC-164-1.

GEN-DC-37-2 If Solitude is granted the combined Nordic and alpine permit, will Solitude be making additional revenue from Redman Campground, and if so, in what way? Will the campground be allowed to remain as it is? None of this was addressed in the DEIS.

Response: See Response to Comment GEN-DC-37-1.

GENERAL

GEN-DC-129-1 While we truly enjoyed the surroundings and the “feel of a smaller, quaint resort area”, the developments listed addressed what our concerns were as families with young children and wives who are novice/intermediate skiers. The canyon itself serves up its “own set of limitations”, and these needed improvements would be of great benefit to visitors without compromising on the natural and ecological areas of concern; the “look and feel” of a small resort would be preserved and Solitude Mountain Resort would make great progress in “leveling the competitive ground.”

Response: Thank you for your comments.

GEN-DC-143-1 Wilderness must prevail. I’m an avid hiker and camper, and hikers need wilderness.

Response: Thank you for your comments. Solitude’s proposed Master Development Plan update would result in no changes to wilderness areas in the WCNF.

GEN-DC-91-1 I am in love with Solitude and travel there frequently with my family. I think that Solitude is and has been in desperate need of expansion to enhance the family experience. The planned facilities mentioned in the Tribune article sound like superb upgrades that would benefit everyone who recreates at Solitude and Big Cottonwood Canyon. The fact that every other resort in Utah has made improvements much more substantial than these proposed at Solitude makes me wonder why comments are even necessary?

Response: Thank you for your comments.

GEN-DC-99-1 The new or proposed transport facilities, new or replacement ski lifts, snowmaking equipment, parking areas and arrangements and other items covered by the MDP will add considerably to the public benefit.

Response: Thank you for your comments.
CHAPTER 4.0
COPIES OF LETTERS FROM GOVERNMENT AGENCIES
July 2, 2001

Daniel J. Jiron, District Ranger
Salt Lake Ranger District
6944 South 3000 East
Salt Lake City, Utah 84121

Re: Draft Environmental Impact Statement Solitude Mountain Resort

Dear Mr. Jiron:

We appreciate the opportunity to review and comment on Solitude's Draft Environmental Impact Statement. We offer the following comments for your consideration prior to preparing the final record of decision:

1. We are very concerned that the proposed plan introduces a new level of impacts on Salt Lake City's watershed in Big Cottonwood Canyon and its environs. The proposed action is designed to use public lands to support not only the skiing but also year around recreation for canyon visitors and residents of the Solitude development. The proposed plan introduce activities such as Alpine slides, and inline skating. With a growing population along the Wasatch Front, such carnival-type activities that can be conducted adequately in the urban environment should be kept out of the alpine watersheds. It seems inappropriate to allow non-alpine activities to be built that are solely designed to import more people to the canyons. The development should be limited to those activities that are truly dependent on an Alpine setting. The proposed plan seems inconsistent with FSM 2303 that prohibits providing facilities for urban-type sports on National Forest System Lands. FSM 2343.11 encourages summertime use of ski area facilities where that use is compatible or enhances natural resource based recreation opportunities and does not require additional specialized facilities. The introduction of these theme park activities is clearly incompatible with this policy.

2. The Draft Environmental Impact Statement (DEIS) fails to address the real impacts on water quality and the watershed. The Environmental Impact Statement states, "Development at Solitude has the potential to increase bacteria in Big Cottonwood Creek due to increased use of the canyon and the potential for increased year-round recreational opportunities at the canyon's two ski resorts." The plan fails to address this impact in any meaningful way. Mitigation of the cumulative effects of the proposed development is simply shifted to Salt Lake City to develop "regulatory control necessary to accurately identify water quality impacts stemming from increased use of the Big Cottonwood watershed." This
approach is unacceptable. Impacts to water quality should be minimized in the proposed plan either effectively mitigated or eliminated.

3. The proposed plan seeks to use 3.39 acres of public land to replace parking that Solitude essentially removed from their privately owned property so those lands could be used for residential and commercial developments. We don't feel it's appropriate to relocate the parking on public lands. This is in effect using public lands to support private development. The result is increased degradation of water quality both from increase development and impacts due to parking expansion. Under the 1985 Forest plan additional skier parking lots are not allowed on National Forest lands. We are opposed to and believe that the two story parking structure violates the 1989 Salt Lake County Wasatch Canyons Master Plan. The plan states that additional parking lots are not allowed at the ski areas on private lands unless they contribute to solving transportation problems.

4. The DEIS fails to address the impacts of snow removal and storage on water quality. This issue has received a lot of concern at the neighboring Brighton Ski Resort. We do not believe a record of decision is possible without understanding the potential impacts on water quality from these activities.

5. The DEIS proposes to modify Lake Solitude to allow pumping of Big Cottonwood Creek Water into the Lake for storage to support snowmaking operation. The DEIS did not provide sufficient analysis of the proposed impacts to allow for an informed decision on this proposal. The impacts to water quality, public safety and the natural environment need to be identified and evaluated.

6. We are opposed to the Sol-Bright lift and trail. This is the beginning of the ski inter-connect system. The 1989 Salt Lake County Wasatch Canyons Master Plan clearly states that any inter-connect must be part of the larger mountain transportation system. The cumulative impacts of the ski inter-connect are not addressed in the DEIS. Additionally, some of the property associated with this lift may be on Salt Lake City property. We have reviewed an easement given to use by representatives of Solitude. The easement, recorded in book 5342 page 1491 of Salt Lake County records, from Chesla Patterson to Solitude provides only the right to control avalanches and does not allow ski lift construction.

7. The Proposed Action allows the construction of a new Redman Lift and Run - We have a concern that locating this lift and run in such close proximity to the Big Cottonwood stream will impact water quality. The lift exceeds Solitudes existing forest permit boundary and we strongly oppose any expansion outside the existing boundary. This expansion would also violate the Salt Lake County Wasatch Canyons Master Plan.

8. The DEIS proposes to construct a 10 unit RV trailer park. Salt Lake City opposes camping outside of designated camping facilities by ordinance. This facility would have to be designated for overnight camping with the agreement of the
Forest Service and Public Utilities. This is a departure from normal procedures since overnight camping has been strictly a summer activity to date. The establishment of an RV dump station on this property has to be carefully reviewed for potential impacts to the sewer main. Illegal dumping could have significant impact to the canyon and without continuous surveillance would be a problem.

9. The City opposes the construction of single track mountain bike trails and the cumulative impact this new use would have on the carrying capacity of the canyons. These mountain bike trails need to be studied more extensively looking at the canyon wide impacts they may cause.

10. The development of a sewer lift station to accommodate easy access to the sewer line is unacceptable. The installation of a lift station increases the potential for sewage spills and backups. An extended pipeline to accommodate flow without a lift station is the recommended resolution to this issue.

Again we appreciate the opportunity to review this draft Environmental Impact Statement and working with your staff. If you have any further questions please contact Russ Hone, Watershed Administrator at 801-483-6705.

Sincerely,

Florence Reynolds,  
Water Quality and Treatment Administrator

RKH:vb  
cc: file
Mr. Dan Jiron, District Ranger
Salt Lake Ranger District
6944 South 3000 East
Salt Lake City, Utah 84121

SUBJECT: Solitude Mountain Resort DEIS
Project No. 01-749

Dear Mr. Jiron:

The Resource Development Coordinating Committee (RDCC), representing the State of Utah, has reviewed this proposal. Comments from State agencies are as follows.

Air Quality

This proposed project is subject to Utah Air Conservation Rules (UACR) R307-205, Emission Standards, Fugitive Emissions and Fugitive Dust. These rules apply to sources that produce fugitive dust and fugitive emissions that are associated with mining activities. In addition, a permit application, known as a Notice of Intent (NOI), may be required if certain conveyors, crushers, or screens are used during mining operations. You can download copies of the UACR from our website: www.deq.state.ut.us or call (801) 536-4000 for more information.

Division of Wildlife Resources

The Utah Division of Wildlife Resources is concerned that the Proposed Action (Alternative 2) will result in impacts to 3.5 acres of wetlands and riparian areas, which is the largest such impact of all six alternatives presented and analyzed in the DEIS. Alternatives 4 and 5, for example, would allow the project to proceed while impacting only 0.6 wetland and riparian acres.

Until avoidance of impacts to wetland and riparian habitats is truly considered, we do not feel that it is appropriate to discuss mitigation for such impacts. We strongly recommend that the Wasatch-Cache National Forest evaluate all alternatives with the goal of avoiding impacts to wetlands and riparian areas.

Thank you for the opportunity to review this proposed action and provide comment. If you have any questions, please call Douglas Sakaguchi, Habitat Manager, at our Central Region Office (801-491-5634).

The Committee appreciates the opportunity to review this proposal. Please direct any other written questions regarding this correspondence to the Resource Development Coordinating Committee at the above address or call Carolyn Wright at (801) 538-1555 or John Harja at (801) 538-1559.

Sincerely,

John Harja
Manager, Resource Planning and Legal Review

RECEIVED
SALT LAKE RANGER DISTRICT
JUN 18 2001
WASATCH-CACHE NATIONAL FOREST
June 13, 2001

Dan Jiron, District Ranger
Salt Lake Ranger District
U.S. Forest Service
6944 South 3000 East
Salt Lake City, Utah 84121

Dear Mr. Jiron:

The Department of the Interior has reviewed the Draft Environmental Impact Statement for the proposed Solitude Mountain Master Development Plan update and has the following comments.

General Comments

We commend the Forest Service for the thorough analysis and alternatives. We believe that Alternative 5, or Alternative 6 with the following modifications, in conjunction with the proposed mitigation measures, provides appropriate protection for fish and wildlife resources.

A bridge should be constructed over Big Cottonwood Creek instead of an arch culvert to minimize impacts on stream hydrology and wetlands. The bridge should fully span the floodplain and wetlands.

We recommend against diverting water for snowmaking from Big Cottonwood Creek which is listed as a State of Utah Class II stream. The watershed also has two State of Utah Conservation Agreement species, the Bonneville cutthroat trout (*Oncorhynchus clarki utah*) and spotted frog (*Rana pretiosa*). If the diversion is constructed, fish passage should be provided for adult and juvenile fish and the diversion should be screened to eliminate fish from entering the diversion canal or pipe.

We recommend against widening roads, trails, or placing underground utilities that could, either directly or indirectly (through erosion and sedimentation), impact floodplains or wetlands.

Roads and other facilities should be designed to minimize fragmentation of habitat for flammulated owl, northern goshawk, and other interior forest species.
Night lighting should not be permitted because of potential behavioral disturbance to the following species: Canada lynx (Lynx canadensis), a federally listed species, listed as threatened; wolverine (Gulo gulo), a State of Utah threatened species and Forest Service listed sensitive species; and the golden eagle (Aquila chrysaetos) and goshawk (Accipiter gentilis), year round residents in Big Cottonwood canyon.

Stormwater detention pond plans should be incorporated into existing and planned roads and parking lots to protect water quality.

The Utah Division of Wildlife Resources and the Fish and Wildlife Service should be included during development and implementation of mitigation plans for aquatic resources, soil and water quality, vegetation, wetland and riparian areas, and wildlife.

Sincerely,

Robert F. Stewart
Regional Environmental Officer
Dear Mr. Cruz:

In accordance with our responsibilities under the National Environmental Policy Act (NEPA), 42 U.S.C. Section 4321, et. seq., and Section 309 of the Clean Air Act, the Region VIII Office of the Environmental Protection Agency (EPA) has reviewed the referenced Draft Environmental Impact Statement (DEIS) for compliance with the National Environmental Policy Act and relevant sections of the Clean Water Act (CWA).

The Solitude Master Development Plan (MDP) is a highly complex project including a large number of proposed actions, and including analysis of numerous alternatives to those actions. The United States Forest Service (USFS), the ski company and its contractors did a remarkable job of organizing, displaying and explaining the proposed actions. Even with good documentation, this is still a very complex project, and we thank the USFS for allowing an extension of the comment period for the public so they had an adequate opportunity to make informed comments.

EPA is extremely troubled by the trend in the use of ski area expansions as a tool to attract market share from other resorts in a flat skier market as documented in this DEIS (p. 3-86). Providing ski terrain on public lands was intended to meet the demand for public skiing, not to create the demand. Given the well-documented, environmental impacts associated with ski area expansions, it seems an unnecessary abuse of the public's environmental resources to allow ski expansions for the sole purpose of attracting skiers from other resorts. The other resorts then feel pressure to expand once again to attract "their" skiers back. Under this scenario, even if the skier market decreases over time, we will continue to see our public lands swallowed up by a never-ending string of expansions, with their requisite and irreversible environmental impacts. It is important to note that the proposal at Solitude is, in most regards, a refreshing break from this trend. With this proposal, Solitude is depending largely on improving their facilities rather than on adding large blocks of new ski terrain on public lands in order to maintain or expand its skier base. Generally EPA supports this project and its goals of providing
an improved recreational resource for the public. However, we do have some specific concerns that we raise in the letter.

We note in the DEIS, several proposals to located new ancillary facilities, including parking, housing, an alpine slide and a skating rink. EPA offers a caution against placing ancillary facilities on public lands, where those facilities could result in the loss of natural or forest character in the area. As you are aware, when national forest lands lose their natural character, they are vulnerable to future land exchanges (see the Purpose and Need statements for the Grand Targhee/Squirrel Meadows Land Exchange project). The USFS policies on land exchanges make it difficult to deny any reasonable land exchange proposal involving a parcel that has lost natural character, making these lands vulnerable to future loss from the public domain.

EPA is providing specific environmental and NEPA comments on the DEIS. My staff have coordinated with your office on the issues presented (we enclosed). EPA is rating the Draft Solitude MDP as EC-2 (Environmental Concerns, Insufficient Information) due largely to the concerns regarding the impacts to, or analysis of, water quality, water quantity, aquatic and wetland habitat, wildlife habitat, alpine tundra and development of facilities potentially inappropriate for USFS lands. “EC” indicates that the EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce these impacts. The “2” means either the draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses or discussion should be included in the final EIS (FEIS). A full description of EPA’s EIS rating system is enclosed.

We appreciate the opportunity to review the document and will continue to work with the Forest Service to address both NEPA and regulatory compliance issues with the proposed project. If you have any questions or concerns regarding these comments or recommendations, please contact Phil Strobel of my staff (303) 312-6704.

Sincerely,

Original Signed by Cynthia G. Cody

Cynthia G. Cody
Chief, NEPA Unit
Ecosystems Protection Program

Enclosures:
EPA's Specific Comments for the Solitude MDP Draft EIS

Mountain Bike Trail

The proposed trail is located primarily on soils with "very high" erosion hazards, including along the intermittent creek in Honeycomb Canyon. Mountain bike trails almost invariably result in unintended social trail development. Because the majority of the proposed trail is on fragile soils, these social trails could have a disproportionate adverse impact to soil stability and vegetative cover. The FEIS should indicate whether there are mitigation steps available to prevent or reduce the occurrence of social trail development.

The bike trail appears to cross the intermittent stream in Honeycomb Canyon approximately nine times. We could not find any statement regarding whether there are wetland impacts associated with these crossings. Further, this reviewer is unfamiliar with the topography of the Canyon. Would it be possible for bikers to pioneer trails along the creek channel or adjacent to the channel, thereby indirectly affecting wetland resources?

It appears that the bike trail could provide access to alpine tundra in Honeycomb Canyon to the west and north of the Summit Lift terminal. Depending on specific local conditions, access to alpine tundra can encourage off-trail use. As we know, it is impossible to completely eliminate the threat of off-trail pioneering. Alpine tundra is extremely sensitive to vegetation or soil disturbance, and the effects are virtually irreversible, so we encourage the Ski Company and the USFS to eliminate the opportunity to access these areas wherever possible by routing the trail to avoid the potential for irreversible impacts.

The public and the decision maker would benefit from some additional information in the FEIS regarding the potential for wildlife impacts in Honeycomb Canyon. The DEIS briefly discusses the potential for goshawk impacts (p. 4-105 and 4-115) but no other species are mentioned. Given that summer recreational use of the Canyon is currently minimal, and human use of the greater Big Cottonwood Canyon (BCC) is extensive, a few questions arise. Do wildlife values exist in the Canyon that are not discussed in the DEIS such as ungulate calving or predator and/or ungulate security cover? If the Canyon does supply these habitat values, would they be affected by the proposed trail? Finally, are habitat values such as security cover in limited supply in the BCC? While these impacts would apparently occur primarily on private lands, the trail is dependent on USFS public lands for part of its course. It is therefore important that the USFS and the public understand the impacts on both public and private lands to determine whether to authorize the trail segments on public lands.

Water Quantity

The DEIS indicates the minimum in-stream flow requirements for Big Cottonwood Creek at Solitude that would be applicable if the snowmaking diversion weir is approved. However, we found no information in the DEIS on the existing flows at Solitude for the months of October through January. Without this information, it is not possible to understand the extent of impact to be expected from operation of the weir. Ideally, the FEIS would include data regarding the mean and historic low flows for each month of anticipated snowmaking. The FEIS should then evaluate the average and maximum impact to stream flow, and therefore to aquatic habitat.
resulting from the project. If the Wasatch-Cache National Forest (WCNF) has a standard for aquatic habitat, the FEIS should indicate whether the operation of the weir would comply with the standard.

**Alpine Tundra**
The USFS and the ski company should seek to avoid then minimize vegetation or soil impacts on alpine tundra or talus. Recent discussions with scientists from the Forest Service and other Federal agencies have indicated that the environmental impacts from soil - or vegetation - disturbing activities in alpine tundra and talus cannot be predicted, nor can the effectiveness of mitigation be predicted given the current state of the science. Furthermore, soil or vegetation impacts in alpine tundra are, for all practical purposes, irreversible. Because of the irreversible nature of these impacts the USFS should seek, wherever possible, to avoid disturbing tundra and talus through roads, towers, utility corridors, summer recreation trails, and snow-making lines. We encourage the USFS to focus summer recreation opportunities toward sub-alpine systems that are more able to attenuate the effects of disturbance.

**Parking Structures**
Because Big Cottonwood Creek is a protected source for drinking water, we are concerned with any proposal to increased impervious surface acreage with parking lots because of the well established link between impervious surface and adverse impacts to water quality. For this reason, EPA supports the two-deck parking alternative presented in Alternative 5 as environmentally preferable. EPA therefore does not support amending the Wasatch-Cache Land and Resource Management Plan to allow parking on public lands because there is an adequate alternative by adding capacity to the Moonbeam Lot and there is additional (and avoidable) impacts from the permitting parking lots on public lands.

If the USFS decides to authorize construction of either the West End lot or the High Occupancy Vehicle (HOV) lot. we would ask that snow removal and storage issues be thoroughly mitigated to protect water quality in the Creek.

**Wetlands**
We are generally pleased with the Forest Service approach to minimizing impacts to wetlands in the Solitude Ski Area and appreciate the consideration of EPA’s concerns as identified during our site visits and scoping on this project. We recognize and appreciate the proposed improvements to snow management on parking lots at the resort, a practice that has historically impacted wetlands and riparian areas at this site. By paving the parking areas, removing debris from depositional areas, and by not plowing snow into streams, wetlands or riparian areas, the impacts from these parking lots should be significantly reduced. Snow disposal in waters of the U.S. or in riparian areas has been considered a violation of the Clean Water Act where pollutants are involved. Page 2-18 indicates that the Forest Service and Corps of Engineers intend to monitor wetland and riparian areas adjacent to snow disposal sites to insure adequate protection. We encourage the Forest Service to include automotive chemicals (examples could include: oil, MBTE, ethylene glycol) in the monitoring program as it was not possible to determine from the document whether the proposed mitigation measures would eliminate impacts from such pollutants. Because this DEIS includes a practicable opportunity to reroute utility lines without impacts to wetlands, that alternative must be selected according to the Clean Water Act.
Ancillary Facilities: Alpine Slide and Outdoor Skating Rink

The Solitude DEIS cites some policy on the issue of ancillary facilities on public lands (p 1-19). The Record of Decision for Arapaho Basin Ski Area's MDP (November 1999) includes slightly more detail regarding useful references to relevant policy, regulation and guidance for ancillary facilities. At A-Basin, based on the review of these policies, the USFS denied a proposed alpine slide on public lands stating, "authorizing the alpine slide would not be consistent with relevant law, regulation, and/or policy."

Ski Area permits are issued under the authority of PL 99-522. The National Forest Ski Area Permits act of 1986. This act authorizes the Forest Service to issue permits for the use and occupancy of NPS lands for nordic and alpine skiing operations. It further states: "(a) ski area permit shall encompass such acreage as the Secretary determines sufficient and appropriate to accommodate the permittee's needs for ski operations and appropriate ancillary facilities."

Both the House Interior and Insular Affairs and Senate Energy and Natural Resources Committees issued substantially identical reports on this Act. With regard to what constitutes "appropriate ancillary facilities" the reports state: "(t)he Committee further notes that the phrase "ancillary facilities" is intended to include only those facilities which are not integrally part of skiing operations should not be issued permits under the authority of this bill which is intended to apply only to ski areas."

It is clear that neither the alpine slide or the skating rink are directly necessary for the operation and support of a ski facility. Alpine slides also fall into the class of developments specifically restricted from authorization under this bill based on their similarity to watershides.

Title 36 of the Code of Federal Regulations, in defining ski areas states: "(a) ski area may also include ancillary facilities directly related to operations and support of skiing activities." This language is consistent with the language in the Committees' reports stressing that facilities must be directly related to the operations and support of skiing activities.

Forest Service Policy found in FSM 2343.11 states: "(e)ncourage summertime use of ski area facilities where that use is compatible with or enhances natural resource-based recreation opportunities and does not require additional specialized facilities." An alpine slide is a "specialized facility" and hence, authorizing one at a ski area would be contrary to Forest Service Policy, regardless of the type of authorization employed.

Forest Service Policy also calls for denial of applications by the private sector to construct or provide outdoor recreations facilities if the facilities are reasonably available elsewhere (FSM 2340.3). The fact that an alpine slide is available at Park City meets the policy criteria for denying an application employed.

While we understand that these amenities may occur on Federal Lands at other resorts, that does not excuse the USFS from adhering to its policy or regulation in this case.
Miscellaneous Comments
EPA supports replacement of the existing Moonbeam Bridge with a half-arch bridge in order to re-establish fish passage and restore a riparian corridor for animal movement.

This DEIS includes the best explanation of SAOT and CCC statistics we have yet seen. The public and the reviewing agencies benefit from understanding how these terms are developed and used in the planning and analysis processes.
Comments from Salt Lake County Planning and Development Services Regarding Draft Environmental Impact Statement for Solitude Mountain Resort
### Table: Proposals vs. Master Plans

<table>
<thead>
<tr>
<th>Support Facilities</th>
<th>Wasatch Canyons Master Plan</th>
<th>Foothills and Canyons Overlay Zone</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NFS Land</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| C-1, C-2, C-3 Resort Operations Center: (18,000 sq ft; 3 stories) | Ski area expansion is supported within existing Forest Service permit area boundaries. (p 72) | Alternative 2 is most in line with the intent of FCOZ ordinance. The Salt Lake County Fire Department has issued a requirement that no further development occur until a fire station has been constructed. If alternative 1 were approved no further development on Private Land would be allowed. 
It is recommended that any approval be subject to the requirements of the Wasatch Canyons Master Plan and the Foothills and Canyons Overlay Zone Ordinance. A building permit should be required. |
| * SL Co Fire Station,  
* Helicopter Landing Pad,  
* Vehicle Maintenance,  
* Resort Operations |                             |                                   |
| **Private and Forest Service** |                             |                                   |
| C-4 Eagle Express Day Lodge: (5000 sq ft, will replace 2 existing bldg) | Ski area expansion is supported within existing Forest Service permit area boundaries, including privately owned lands. (p 72) | Approval of the Eagle Express Day Lodge would be subject to the requirements of the Wasatch Canyons Master Plan and the Foothills and Canyons Overlay Zone Ordinance. A building permit would be required. 
FCOZ is supportive of a sewer system in the canyon areas. |
| Sewer pump station would be installed in the Eagle Express bldgs.  
3000 sq ft terminal (1000 sq ft on NFS land) for the west end of the Pulse Gondola  
A 2500 sq ft terminal building for the south terminal of the West End parking lot access lift  
Install sewer line through main Moonbeam parking lot to near Moonbeam Center. | "Construction of a sewer line in big Cottonwood Canyon is endorsed and encouraged." (p 71) | See comments about the Pulse Gondola and associated Terminals. |
| **NFS Land**       |                             |                                   |
| C-5 Moonbeam Center: (10,000 sq ft; 2 stories) | Ski area expansion is supported within existing Forest Service permit area boundaries, including privately owned lands. (p 72) | Approval of the Moonbeam Center should be subject to the requirements of the Wasatch Canyons Master Plan and the Foothills and Canyons Overlay Zone Ordinance. A building permit should be required. 
See comments about the Pulse Gondola and associated Terminals. |
| Expand the Existing Building  
Connect to the mid-point of the proposed Pulse Gondola  
Provide drop off and pickup area for mass transit vehicles | One of the goals of the Wasatch Canyons Master Plan is to reduce private vehicular traffic in the cottonwood canyons during peak periods" and to "discourage private automobile use and to encourage use of mass transit..." (p8 WCMP brochure) Therefore providing drop off and pickup areas for mass transit vehicles is encouraged. |                                   |
<table>
<thead>
<tr>
<th>Proposals</th>
<th>Wasatch Canyons Master Plan</th>
<th>Foothills and Canyons Overlay Zone</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NFS Land</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D-1 Last Chance Mining Camp Expansion</td>
<td></td>
<td>Alternative 3 seems most in line with FCOZ objectives.</td>
</tr>
<tr>
<td>Expand existing building footprint by 16,000 sq ft</td>
<td></td>
<td>Recommend any approval be subject to the requirements of the Wasatch Canyons Master Plan and the Foothills and Canyons Overlay Zone Ordinance. A building permit should be required.</td>
</tr>
<tr>
<td>Incorporate east end of the Pulse Gondola.</td>
<td></td>
<td>See comments about pulse gondolas.</td>
</tr>
<tr>
<td><strong>NFS Land</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D-2 Small Trapper's Cabin</td>
<td></td>
<td>Alternative 8 seems most in line with FCOZ objectives.</td>
</tr>
<tr>
<td>Construct a 'trappers cabin' of about 500 sq ft on the north side of the Children's pond to house educational opportunities</td>
<td></td>
<td>Recommend any approval be subject to the requirements of the Wasatch Canyons Master Plan and the Foothills and Canyons Overlay Zone Ordinance. A building permit should be required.</td>
</tr>
<tr>
<td><strong>Ski Lifts</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private and Forest Service</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D-9 Apex Upgrade</td>
<td></td>
<td>Alternative 3 seems most in line with FCOZ objectives.</td>
</tr>
<tr>
<td>Upgrade to a high speed detachable quad in existing location.</td>
<td></td>
<td>Upgrading to a high speed quad would not be inconsistent with FCOZ.</td>
</tr>
<tr>
<td>Private and Forest Service</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D-9 Powderhorn Upgrade</td>
<td></td>
<td>Alternative 2 seems most in line with FCOZ objectives.</td>
</tr>
<tr>
<td>Upgrade to a high speed detachable quad in existing location.</td>
<td></td>
<td>Upgrading to a high speed quad would not be inconsistent with FCOZ.</td>
</tr>
<tr>
<td>Private and Forest Service</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C-10 Moonbeam II upgrade and realignment</td>
<td></td>
<td>Alternative 5 seems most in line with FCOZ objectives.</td>
</tr>
<tr>
<td>Upgrade to a high speed detachable quad.</td>
<td></td>
<td>Upgrading to a high speed quad would not be inconsistent with FCOZ.</td>
</tr>
<tr>
<td>Realignment by moving base terminal approx. 200 ft west and top terminal 300 ft uphill and to east.</td>
<td></td>
<td>Realignment may require a waiver or modification from the slope protection standards in FCOZ. A grading permit would also be required.</td>
</tr>
<tr>
<td>Private and Forest Service</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D-7 Pulse Gondola</td>
<td></td>
<td>Ski area expansion is supported within existing Forest Service permit area boundaries, including privately owned lands... (p 72)</td>
</tr>
<tr>
<td>Construct a two-stage &quot;people mover&quot; connecting the Last Chance Mining Camp to the Moonbeam Center and then to the proposed Eagle Express Day Lodge.</td>
<td></td>
<td>Alternatives 3 and 5 seem most in line with FCOZ objectives.</td>
</tr>
<tr>
<td>Private and Forest Service</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E-2 Redman Lift</td>
<td></td>
<td>Ski area expansion is supported within existing Forest Service permit area boundaries, including privately owned lands... (p 72)</td>
</tr>
<tr>
<td>Construct a new beginners lift.</td>
<td></td>
<td>Alternative 1 is preferred because it supports the objectives of the WCMP.</td>
</tr>
<tr>
<td>This proposal extends beyond the current Forest Service permit boundary and should be discouraged. Approval would require an amendment to the plan.</td>
<td></td>
<td>Waivers or modifications from the slope protection standards in FCOZ would be required prior to approval of any new lifts. (p 19.72.030)</td>
</tr>
<tr>
<td>Proposals</td>
<td>Wasatch Canyons Master Plan</td>
<td>Foothills and Canyons Overlay Zone</td>
</tr>
<tr>
<td>-----------</td>
<td>----------------------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td><strong>Ski Lifts Continued</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private and Forest Service</td>
<td>E-5 Honeycomb Return Lift</td>
<td>Ski area expansion is supported within existing Forest Service permit area boundaries, including privately owned lands. (p 72)</td>
</tr>
<tr>
<td></td>
<td>Construct a new lift on private land from Honeycomb Canyon to Lower Eagle Ridge.</td>
<td></td>
</tr>
<tr>
<td>Private and Forest Service</td>
<td>D-8 Sol-Bright Lift</td>
<td>Ski area expansion is supported within existing Forest Service permit area boundaries, including privately owned lands. (p 72)</td>
</tr>
<tr>
<td></td>
<td>Construct a new lift from below Twin Lakes Dam to Mill Pct So. Fork Pass. (would help to improve connections with Brighton)</td>
<td></td>
</tr>
<tr>
<td><strong>All/E Land</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>C-11 Magic Carpet</td>
<td>Ski area expansion is supported within existing Forest Service permit area boundaries, including privately owned lands. (p 72)</td>
</tr>
<tr>
<td></td>
<td>Construct a ground level conveyance system adjacent to Last Chance Mining Camp (to benefit beginning skiers.)</td>
<td></td>
</tr>
<tr>
<td><strong>Future and Forest Service</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>F-2 West End Access Lift (and Parking Lot)</td>
<td>Ski area expansion is supported within existing Forest Service permit area boundaries, including privately owned lands. (p 72) however this proposal extends beyond the current Forest Service permit boundary and should be discouraged. Approval would require an amendment to the plan.</td>
</tr>
<tr>
<td></td>
<td>Construct double-chair lift to move skiers from the West End parking lot to the Eagle Express base area</td>
<td></td>
</tr>
<tr>
<td><strong>Private Land</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>E-6, E-7, E-8 Regrading of Top Lift Terminals, Sunrise, Summit and Eagle Express</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Ski Trails</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private and Forest Service</td>
<td>E-2 Redman Trail</td>
<td>Ski area expansion is supported within existing Forest Service permit area boundaries, including privately owned lands. (p 72) The proposal extends beyond the current Forest Service boundary and should be discouraged. Approval would require an amendment to the plan.</td>
</tr>
<tr>
<td></td>
<td>Construct a new 200 ft wide trail adjacent to the proposed Redman Lift.</td>
<td></td>
</tr>
<tr>
<td>Proposals</td>
<td>Wasatch Canyons Master Plan</td>
<td>Foothills and Canyons Overlay Zone</td>
</tr>
<tr>
<td>-----------</td>
<td>-----------------------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td><strong>Ski Trails Continued</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>NFS Land</strong> E-3</td>
<td>Construct a new-intermediate trail from the top of Sunrise Lift to west of Northstar trail. Ski area expansion is supported within existing Forest Service permit area boundaries, including privately owned lands... (p 72)</td>
<td>Alternative 6 seems most in line with objectives of the FCOZ ordinance. A grading permit should be required.</td>
</tr>
<tr>
<td><strong>Forest Land</strong> C-9</td>
<td>Apex Upgrade Terrain Modifications to include: Improving unloading conditions by dropping the grade by 20 ft.</td>
<td>Alternative 6 seems most in line with FCOZ objectives. Changing the grade by more than 12 feet would require a waiver or modification from the slope protection standards in FCOZ. A grading permit would be required.</td>
</tr>
<tr>
<td><strong>NFS Land</strong> F-1</td>
<td>Lower Easy StreetLink Lift bottom terminal Area Widen this area by approx. 25 acres to improve skier circulation and lift access.</td>
<td>The FCOZ ordinance allows for &quot;Construction activities or facilities associated with the ongoing operation and maintenance of approved ski runs, ski trails, ski lifts and related appurtenances, recreational access corridors, pedestrian or non-motorized trails, or vehicular maintenance roads constructed or used in connection with the construction, operation or maintenance of a ski resort.&quot; [19.72.070] A grading permit should be required.</td>
</tr>
<tr>
<td><strong>Private and Forest Service</strong> C-7</td>
<td>SkiBright Trail Construct a new section, widen and reconstruct the existing upper section, improve both lower sections. Ski area expansion is supported within existing Forest Service permit area boundaries, including privately owned lands... (p 72)</td>
<td>Alternative 4 seems most in line with objectives of the FCOZ ordinance. The FCOZ ordinance allows for &quot;Construction activities or facilities associated with the ongoing operation and maintenance of approved ski runs, ski trails, ski lifts and related appurtenances, recreational access corridors, pedestrian or non-motorized trails, or vehicular maintenance roads constructed or used in connection with the construction, operation or maintenance of a ski resort.&quot; [19.72.070] Weavers or modifications from the slope protection standards in FCOZ would be required prior to approval of any new trails [19.72.030] A grading permit is required on Private Lands and should be required on Public Land.</td>
</tr>
<tr>
<td>Proposals</td>
<td>Wasatch Canyons Master Plan</td>
<td>Foothills and Canyons Overlay Zone</td>
</tr>
<tr>
<td>----------</td>
<td>-----------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td><strong>Private Land</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E-12 Upper Same Street</td>
<td>Widen a 100ft section of trail by 40ft.</td>
<td>Alternative 4 seems most in line with objectives of the FCOZ ordinance. The FCOZ ordinance allows for &quot;Construction activities or facilities associated with the ongoing operation and maintenance of approved ski runs, ski trails, ski lifts and related appurtenances, recreational access corridors, pedestrian or non motorized trails, or vehicular maintenance roads constructed or used in connection with the construction, operation or maintenance of a ski resort.&quot; [19.72.070] A grading permit would be required.</td>
</tr>
<tr>
<td><strong>Private Land</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C-8 Fleet Street and Fluid Drive</td>
<td>Ground modifications to ravine.</td>
<td>Alternative 6 seems most in line with objectives of the FCOZ ordinance. The FCOZ ordinance allows for &quot;Construction activities or facilities associated with the ongoing operation and maintenance of approved ski runs, ski trails, ski lifts and related appurtenances, recreational access corridors, pedestrian or non motorized trails, or vehicular maintenance roads constructed or used in connection with the construction, operation or maintenance of a ski resort.&quot; [19.72.070] Approval would be subject to the requirements of the Foothills and Canyons Overlay Zone Ordinance.</td>
</tr>
<tr>
<td><strong>NFS Land</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E-4 Ski School Staging Area</td>
<td>Widen existing ski school area.</td>
<td>Alternative 6 seems most in line with objectives of the FCOZ ordinance. The FCOZ ordinance allows for &quot;Construction activities or facilities associated with the ongoing operation and maintenance of approved ski runs, ski trails, ski lifts and related appurtenances, recreational access corridors, pedestrian or non motorized trails, or vehicular maintenance roads constructed or used in connection with the construction, operation or maintenance of a ski resort.&quot; [19.72.070] A grading permit should be required.</td>
</tr>
<tr>
<td>Proposals</td>
<td>Wasatch Canyons Master Plan</td>
<td>Foothills and Canyons Overlay Zone</td>
</tr>
<tr>
<td>-----------</td>
<td>-----------------------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td><strong>Private Land</strong></td>
<td>E-9 Upper Little Dolly and Wanderer Bowl Cut and fill in selected areas.</td>
<td>The FCOZ ordinance allows for &quot;Construction activities or facilities associated with the ongoing operation and maintenance of approved ski runs, ski trails, ski lifts and related appurtenances, recreational access corridors, pedestrian or non-motorized trails, or vehicular maintenance roads constructed or used in connection with the construction, operation or maintenance of a ski resort.&quot; [19.72.070] A grading permit would be required.</td>
</tr>
<tr>
<td><strong>Private Land</strong></td>
<td>E-10 North Star</td>
<td>The FCOZ ordinance allows for &quot;Construction activities or facilities associated with the ongoing operation and maintenance of approved ski runs, ski trails, ski lifts and related appurtenances, recreational access corridors, pedestrian or non-motorized trails, or vehicular maintenance roads constructed or used in connection with the construction, operation or maintenance of a ski resort.&quot; [19.72.070] A grading permit would be required.</td>
</tr>
<tr>
<td><strong>Private Land</strong></td>
<td>E-11 Upper Serenity Remove a small section of a tree island.</td>
<td>FCOZ: The removal of trees or vegetation [in accordance with approved forestry management practices] and &quot;The selective and limited removal of trees and vegetation in conjunction with permitted minor ski resort improvements&quot; are exempt from control under the Foothills and Canyons Overlay Zone Ordinance. ref 19.72.030.H.2 subsections c and d. No additional review or permits would be required.</td>
</tr>
<tr>
<td><strong>Private Land</strong></td>
<td>O-9 Powderhorn Upgrade Widening and rock and stump removal on Concord, Eagle Ridge and Paradise Lost trails.</td>
<td>The FCOZ ordinance allows for &quot;Construction activities or facilities associated with the ongoing operation and maintenance of approved ski runs, ski trails, ski lifts and related appurtenances, recreational access corridors, pedestrian or non-motorized trails, or vehicular maintenance roads constructed or used in connection with the construction, operation or maintenance of a ski resort.&quot; [19.72.070] No additional reviews would be required.</td>
</tr>
</tbody>
</table>
## Ski Trails Continued

<table>
<thead>
<tr>
<th>Proposal</th>
<th>Wasatch Canyons Master Plan</th>
<th>Foothills and Canyons Overlay Zone</th>
</tr>
</thead>
<tbody>
<tr>
<td>D-10 Forest Stand Thinning west of Challenger</td>
<td>The Wasatch Canyons Master Plan recognizes the Forest Service Wasatch-Cache National Forest Management Plan as a current management tool for Big Cottonwood Canyon. If this does not include the Forest Vegetation Management Plan it should!</td>
<td>FCOZ: The removal of trees or vegetation in accordance with approved forestry management practices and &quot;The selective and limited removal of trees and vegetation in conjunction with permitted minor ski resort improvements&quot; are exempt from control under the Foothills and Canyons Overlay Zone Ordinance. Ref. 19.72.030 H.2 subsections c and d.</td>
</tr>
</tbody>
</table>

No additional review or permits would be required.

FCOZ supports implementation of the Forest Vegetation Management Plan.

<table>
<thead>
<tr>
<th>Proposal</th>
<th>Parking:</th>
<th>Foothills and Canyons Overlay Zone Ordinance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Install and operate night lighting on Easy Street and Lift and trail, Redman</td>
<td>Alternatives 1 and 6 seem most in line with the objectives of the FCOZ ordinance. &quot;Bright lighting of large areas should only occur where absolutely required by safety considerations, except that lighting for outdoor recreation areas shall be permitted. However, recreation areas must be sensitive to potential impacts its outdoor lighting may have on adjoining properties.&quot; (19.73.110) Approval should be subject to the requirements of the Foothills and Canyons Overlay Zone Ordinance.</td>
<td></td>
</tr>
</tbody>
</table>

## Transportation

<table>
<thead>
<tr>
<th>Proposal</th>
<th>Wasatch Canyons Master Plan</th>
<th>Foothills and Canyons Overlay Zone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parking:</td>
<td>The WCMP states that &quot;Additional parking lots are not allowed at ski areas on private lands unless they contribute to solving transportation problems and improve the physical environment.</td>
<td>In defining the general purpose of the Foothills and Canyons Overlay Zone the ordinance states &quot;...while being cognizant of private property right, to preserve the natural character of the foothills and canyons...&quot; To that end FCOZ requires that parking facilities be located to &quot;minimize their visual impact... Parking facilities shall be located so that they can bescreened to blend into the natural environment... (and) so they do not dominate the streetscape.&quot;</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Proposal</th>
<th>Parking:</th>
<th>Foothills and Canyons Overlay Zone Ordinance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combine Lots A and B in the Village to create a single structured lot at the lot A site</td>
<td>Because there is no increase in area this proposal is in compliance. Review under FCOZ would be required.</td>
<td>Changes to the master plan currently in effect would require review and approval from the Planning Commission. The FCOZ team supports minimizing the areas impacted by parking provided that safe vehicular storage and maneuvering capabilities are maintained. FCOZ review would include analysis and recommendation from the traffic engineer</td>
</tr>
</tbody>
</table>

## Private Land

<table>
<thead>
<tr>
<th>Proposal</th>
<th>Wasatch Canyons Master Plan</th>
<th>Foothills and Canyons Overlay Zone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combine Lots A and B in the Village to create a single structured lot at the lot A site</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proposals</td>
<td>Wasatch Canyons Master Plan</td>
<td>Foothills and Canyons Overlay Zone</td>
</tr>
<tr>
<td>-----------</td>
<td>-----------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td><strong>Transportation Continued</strong></td>
<td></td>
<td><strong>Alternative 3 and 6 seem to be most in compliance with the intent of the FCOZ ordinance. Providing for tied parking in areas where parking already exists and/or which are screened from view from SR-190 is preferable to new parking lots which would be highly visible and impact property which is currently relatively undisturbed.</strong></td>
</tr>
<tr>
<td><strong>Private and Forest Service</strong></td>
<td></td>
<td><strong>Alternative 1 seems most in line with the objectives of the FCOZ ordinance.</strong></td>
</tr>
<tr>
<td>C-15 Moabem Parking Lot and Eagle Express Base Area</td>
<td></td>
<td><strong>This parking lot would not meet the intent of FCOZ as it would be highly visible from SR-190. Expansion of the existing parking lots through the use of tiers would be preferable.</strong></td>
</tr>
<tr>
<td><strong>NFS Land</strong></td>
<td></td>
<td><strong>Alternative 1 seems most in line with the objectives of the FCOZ ordinance.</strong></td>
</tr>
<tr>
<td>C-14 Bus, High Occupancy and Other Vehicle Parking</td>
<td></td>
<td><strong>This parking lot would not meet the intent of FCOZ as it would be highly visible from SR-190. Expansion of the existing parking lots through the use of tiers would be preferable.</strong></td>
</tr>
<tr>
<td><strong>NFS Land</strong></td>
<td></td>
<td><strong>Alternative 1 seems most in line with the objectives of the FCOZ ordinance.</strong></td>
</tr>
<tr>
<td>F-2 West End Parking Lot</td>
<td></td>
<td><strong>This parking lot would not meet the intent of FCOZ as it would be highly visible from SR-190.</strong></td>
</tr>
<tr>
<td><strong>Private Land</strong></td>
<td></td>
<td>These improvements have been completed.</td>
</tr>
<tr>
<td>C-18 Village Entry Road</td>
<td></td>
<td>Alternative 2 seems most in line with FCOZ objectives.</td>
</tr>
<tr>
<td><strong>NFS Land</strong></td>
<td></td>
<td><strong>Alternative 2 seems most in line with FCOZ objectives.</strong></td>
</tr>
<tr>
<td>C-12 Internal Mountain Road between Moabem Parking Lot and Last Chance Mining Camp</td>
<td></td>
<td>The FCOZ ordinance requires that &quot;All streets, roads, private access roads, and other vehicular routes are subject to Salt Lake County Highway and Fire Department review and approval.&quot; [19 72.030 D]. Modifying the road to meet minimum width requirements and to allow for year-round access is recommended. Particularly as this road would provide access to the operators' center fire station. It also offers a solution for access to Giles Flat. Alternative 2 seems most in line with FCOZ objectives.</td>
</tr>
<tr>
<td><strong>NFS and UDOT</strong></td>
<td></td>
<td>Alternative 5 seems most in line with FCOZ objectives as installation of the bridge would restore the stream gradient and help to repair the stream habitat. The FCOZ team would support the findings of the Transportation Engineer and UDOT relative to the widening to allow for accessional lanes, with the understanding that the improvements also meet the requirements of the Wasatch Canyons Master Plan. (Note: alternative 4 is preferred by the Transportation Engineer)</td>
</tr>
</tbody>
</table>

*Note: Alternative 4 is preferred by the Transportation Engineer.*
<table>
<thead>
<tr>
<th>Proposals</th>
<th>Wasatch Canyons Master Plan</th>
<th>Foothills and Canyons Overlay Zone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation Continued</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private Land</td>
<td>C-13 Mass Transit Center</td>
<td>Alternatives 3 or 4 seem most in line with FCOZ objectives. See comments about the Pulse Gondola and associated terminals.</td>
</tr>
<tr>
<td>Private Land</td>
<td>E-13 RV Hookups</td>
<td>The FCOZ ordinance does not specifically prohibit the use of RV hookups however this use as proposed at an existing ski resort seems out of place and not necessary due to the large amount of short term housing being provided by the resort and the close proximity of 'camping' areas in the canyon. It seems counterproductive to allot space to RVs when parking for the resort activities is at a premium and an expansion of parking areas is being requested.</td>
</tr>
<tr>
<td>Snowmaking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private Land, Forest Service</td>
<td>Snowmaking System Expansion</td>
<td>Alternatives 4 seems most in line with the FCOZ objectives. Alternative 6 relative to the underground storage tank is also aligned with FCOZ objectives. A combination of 4 and 6 would be preferable; i.e. allow for burying the existing above ground lines (except where the property is deemed too steep for proper reclamation), prohibit construction of the weir and water removal from Big Cottonwood Creek, allow for modifications to Lake Solitude, or for installation of an underground storage tank. A waiver or modification from the FCOZ slope protection standards would be required for some of these alternatives.</td>
</tr>
<tr>
<td>Private Land</td>
<td>E-14 Lake Solitude Restoration</td>
<td>The FCOZ ordinance does not prohibit the activities which would be necessary to expand the storage capacity of Lake Solitude. However any recommendation for approval would be subject to the favorable recommendation from other reviewing agencies: Salt Lake City Watershed Management, State Dam Safety Board, Army Corps of Engineers, etc. A grading permit would be required.</td>
</tr>
<tr>
<td>Proposals</td>
<td>Wasatch Canyons Master Plan</td>
<td>Foothills and Canyons Overlay Zone</td>
</tr>
<tr>
<td>-----------</td>
<td>-----------------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td><strong>Summer Recreation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E-16 Mountain Bike Trails</td>
<td>The WCMP supports the implementation of Mountain Bike Trails. A limited number of trails or routes should be designated for off-road mountain bike use. Appropriate routes or trails for mountain bike use should be considered and designated by the Forest Service. (p.74)</td>
<td>Trails as part of an approved recreational facility are in harmony with the FCOZ ordinance. Alternative 2 is preferred because it also supports the objectives of the WCMP.</td>
</tr>
<tr>
<td>C-17 Alpine Slide</td>
<td>The Salt Lake County zoning ordinance allows for “Accessory uses and structures customarily incidental to a conditional use.” [19.10] An alpine slide could be considered a use which is incidental to the main use: Ski Resort. In that case Alternative 2 is in harmony with the zoning ordinance. The FCOZ ordinance, however, has prohibitions for development on slopes greater than 30%. Modifications or waivers would need to be granted to allow for this use.</td>
<td></td>
</tr>
<tr>
<td>D-3 Outdoor Skating Rink</td>
<td>The Salt Lake County zoning ordinance allows for “Accessory uses and structures customarily incidental to a conditional use.” [19.10] A skating rink could be considered a use which is incidental to the main use: Ski Resort. The use would be subject to review under the FCOZ ordinance.</td>
<td></td>
</tr>
<tr>
<td><strong>Utilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E-1 Electrical Distribution Center</td>
<td>Alternative 2 seems most in line with FCOZ objectives.</td>
<td>Alternative 2 seems most in line with FCOZ objectives.</td>
</tr>
<tr>
<td>C-6 Satellite and Communication Base Station</td>
<td>Alternative 2 seems most in line with FCOZ objectives.</td>
<td></td>
</tr>
<tr>
<td>D-4 Utah Power Transmission Line Burial</td>
<td>Alternative 4 is most in line with FCOZ objectives as it protects the adjacent riparian area.</td>
<td>Alternative 4 is most in line with FCOZ objectives as it protects the adjacent riparian area.</td>
</tr>
<tr>
<td>D-11 Surface Runoff Drainage and Detention Pond and Sewer Line</td>
<td>Construction of a sewer line in big Cottonwood Canyon is encorced and encouraged. (p.71)</td>
<td>Alternative 2 seems most in line with FCOZ objectives.</td>
</tr>
<tr>
<td><strong>Administration</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Issue a new ski area term permit.</td>
<td>Alternative 2 seems most in line with FCOZ objectives.</td>
<td>Alternative 2 seems most in line with FCOZ objectives.</td>
</tr>
<tr>
<td>Combine Alpine and Nordic Ski Permits</td>
<td>Alternative 2 seems most in line with FCOZ objectives.</td>
<td>Alternative 2 seems most in line with FCOZ objectives.</td>
</tr>
<tr>
<td>Forest Vegetation Management Plan</td>
<td>Alternative 5 seems most in line with FCOZ objectives.</td>
<td>Alternative 5 seems most in line with FCOZ objectives.</td>
</tr>
</tbody>
</table>