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REFRAMING THE LANDSCAPE: ROBERT SMITHSON'S SPIRAL JETTY

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REFRAMING THE LANDSCAPE | Robert Smithson's Spiral Jetty

By

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A thesis submitted in partial fulfillment of the requirements for the degree

of

Master of Landscape Architecture

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ABSTRACT

Reframing the Landscape | Robert Smithson's Spiral Jetty

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This thesis project recognizes Robert Smithson's contribution to the fields of art and landscape architecture with a nomination to the National Register of Historic Places for *Spiral Jetty.* The nomination was completed with support from the Utah State Historic Preservation Office, Dia Art Foundation, and Holt/Smithson Foundation.

Spiral Jetty is considered a highly influential work of the Land art genre. At Rozel Point Smithson constructed a 1,500-foot-long and 15-foot-wide earthwork of site-sourced basalt rock and soil. It extends from the shore approximately 600 feet before collapsing twice in a counterclockwise spiral. Smithson carefully selected the site where the earthwork would be in conversation with its environment, the appearance fluctuating as conditions around it changed. The unique post-industrial setting, in a desolate area, provided an exceptional place for Smithson to explore concepts of scale, time, and entropy. *Spiral Jetty* has inspired generations of artists and landscape architects.

ACKNOWLEDGMENTS

This nomination would not have been possible without the generous support of many individuals including Jordan Carter and Amye McCarther at Dia Art Foundation, Lisa Le Feuvre at Holt/Smithson Foundation, and Cory Jensen and Chris Merritt at the Utah State Historic Preservation Office. I'm also grateful to *Spiral Jetty* stewardship partners including Marisa Weinberg at the Utah Department of Natural Resources, Gretchen Dietrich at The Utah Museum of Fine Arts, and Bonnie K. Baxter at the Great Salt Lake Institute at Westminster University for their time and research support. Many others generously shared their time and expertise including Land art scholar Hikmet Sidney Loe and Charles Birnbaum, President and Founder of The Cultural Landscape Foundation. I recognize my work builds on the efforts of countless scholars who have written extensively about Robert Smithson and *Spiral Jetty*.

Taking on the nomination for such a celebrated artist and work of art was daunting. My thesis committee provided much needed encouragement. My chair, Dr. Ole Sleipness, has been a trusted advocate and mentor during my time at Utah State University. My committee members, Dr. Daniella Hirschfeld and Kirk Huffaker, have generously offered steady guidance, specialized knowledge, and support. Finally, pursuing my graduate degree wouldn't have been possible without my husband, children, family, and friends who cheered me on when I needed it most. I'm grateful to my fellow students and professors at Utah State University for creating an exceptional and enjoyable learning experience.

Amy Reid

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FOREWORD

In the fall of 2022 unsustainable human depletion, prolonged drought and rising temperatures pushed the Great Salt Lake to a new historic low of 4,188.5 feet,[1] almost ten feet below the bottom range for optimal lake health. News accounts were full of scientists warning of ecological and economic collapse if current depletion rates went unchecked. Threats of arsenic dust swirled and a heavy feeling of despair prevailed. Todd Johnson, my Bioregional Planning professor at Utah State University, arranged for our class to visit the Great Salt Lake with Laura Vernon from the Department of Natural Resources. Standing at the historic Saltair site, the Great Salt Lake barely visible in the distance, she reminded us of the once important cultural role the lake played in the lives of Salt Lake City residents. As I considered other locations where people go to connect with the lake today, Robert Smithson's *Spiral Jetty* at Rozel Point on the lake's remote northeastern shore came to mind.

I felt compelled to do something positive to celebrate the lake and the essential ecological functions it provides our region. My interest in cultural landscapes prompted me to check with the State Historic Preservation Office to see if *Spiral Jetty* was listed in the National Register of Historic Places. They confirmed it was eligible and not yet listed. Work to get *Spiral Jetty* listed in the National Register of Historic Places began in spring of 2023.

Cultural landscapes like *Spiral Jetty* are layers of natural and human history. Reading them can help us understand how we've evolved as a society and inspire future action. Today the *Spiral Jetty* site powerfully tells the story of a region whose values toward nature are unsustainable. It is a dramatic call to action for those willing to read the landscape and hear the silent plea.

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[1] "Great Salt Lake – Utah Division of Water Resources," accessed July 31, 2024, https://water.utah.gov/great-salt-lake/.

INTRODUCTION

When Robert Smithson left New York City in 1970 to create *Spiral Jetty* on the Great Salt Lake, landscape architecture was a fractured field divided into two models. The first was Ian McHarg's ecology-based teachings and large-scale urban planning with a focus on analysis. At the site scale McHarg's teachings resulted in "a resurgence of imitative naturalism."[2] The second, "landscape architecture as art," led by Peter Walker and other educators, was a direct response to what they viewed as an analysis heavy approach. Believing "the design process had become so beholden to analyses–ecological, social, and behavioral–that the art of making the landscape visible, beautiful, and memorable had been made subservient to the landscape's function,"[3] inspiration was taken from modern art. This movement had "an aesthetic where form alone could motivate the content,"[4] transforming "functional scenery into a meaningful, perhaps even mystical object, capable of withstanding the test of time."[5]

The stark divide between art and science in the 1970s was representative of a far greater trend whose origin goes back hundreds of years. James Corner's 1990 essay, "Sounding the Depths: Origins, Theory, and Representation," describes the root of this divergence:

> This relation between craft and motivation, the how and the why, is the forgotten role of theory. Originally, art and architecture were understood as a unity between techne and poiesis. Here, techne was the dimension of revelatory knowledge about the world, and poiesis was the dimension of creative, symbolic representation. Techne made no distinction between the theoretical and the practical. Making was understood as the embodiment of knowledge and ideas; we could say that craft was motivated. This unity fell apart in the seventeenth and eighteenth centuries. Techne became a separate body of

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[2] George Hargreaves, "Post Modernism Looks Beyond Itself," Landscape Architecture Magazine 73, No. 4 (July/August 1983), 64.
[3] Elizabeth K. Meyer, "Post-Earth Day Conundrum. Translating Environmental Values into Landscape Design" in *Environmentalism in Landscape Architecture*, ed Michel Conan, (Washington, DC: Dumbarton Oaks, 2000), 189.
[4] James Corner and Alison Bick Hirsch, *Landscape Imagination: Collected Essays of James Corner 1990-2010* (New York: Princeton Architectural Press, 2014), 70; Peter Walker's landscapes are influenced by many artistic practices, not just Minimalism. Explored further by Leah Levy in "Dialogue with the Land: The Art of Peter Walker in *Peter Walker Minimalist Gardens,* (Hong Kong: Spacemaker Press, 1997), 7-9.
[5] Udo Weilacher, *Between Landscape Architecture and Land Art*, (Berlin: Birkhauser, 1999), 206.

> instrumental or productive knowledge, and poiesis became an autonomous creation of subjective and aesthetic reality. This separation coincided with the origin of modern science (technology) and modern aesthetics (art).[6]

The beginning of a modern attempt to connect technology and art in the landscape began in the 1960s with a group of postmodern artists including Robert Smithson, Michael Heizer, Walter DeMaria, Robert Morris, Richard Serra, Sol LeWitt, Bruce Nauman and Robert Irwin.[7] Art critic Rosalind Krauss developed a new structure to explain the groundbreaking historical change these artists brought about in her 1979 essay "Sculpture in the Expanded Field." Krauss argues that as these artists created works between established realms they expanded the field of art and a new theoretical structure was required to place it in historical context.

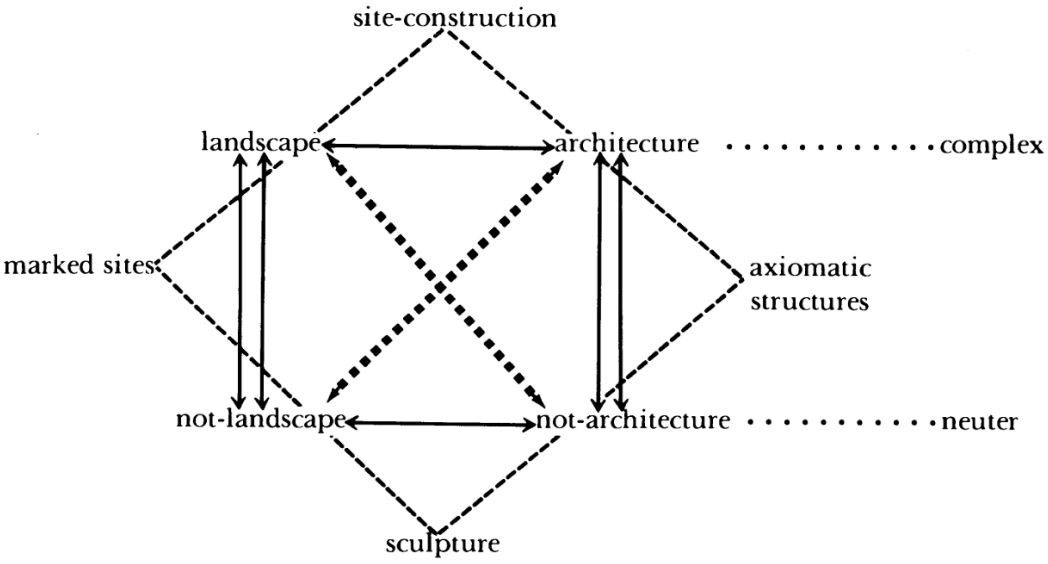

Figure 1: Diagram of Sculpture in the Expanded by Rosalind Krauss, 1979

Krauss claims Robert Smithson operated along the "complex" axis of this new framework. Two of his works are used as key examples. Krauss calls out *Partially Buried Woodshed* (1970) at Kent State in Ohio as an example of site-construction, and *Spiral Jetty* (1970) on the Great Salt

[6] Ibid, 48.
[7] Rosalind Krauss, "Sculpture in the Expanded Field," *October* 8 (1979): 31–44.

Lake in Utah as the key example of a marked site.[8] Land art has replaced the term "marked sites" and Installation art is now used instead of "axiomatic structures."[9]

As landscape architects sought to bridge a field fractured into ecological and design pedagogies, they turned outside landscape architecture for inspiration.[10] Of the postmodern artists, those operating in the field between "not-landscape" and "not-architecture" provided the greatest inspiration.[11] Among others, this group of Land artists included Robert Smithson, Michael Heizer, Walter DeMaria and Robert Irwin.[12] Landscape historian John Dixon Hunt writes:

> What has privileged Land Art in the essentially barren conceptual field of landscape architecture is its sense of creative purpose - the confidence of its practitioners and critics alike that has a firm basis in ideas. Ideas of how to respond to land, ideas of art and design, together with no fear of conjoining them. In short, land Art seems to restore to landscape architecture its old and largely lost concern for the intricate melding of site, sight and insight. I see fundamental and welcome development in this respect from, say, such classic Land Artwork as Robert Smithson's *Spiral Jetty* of 1970 which seems to draw attention more to its own gesture than any *mise en valeur* of the surrounding territory…"[13]

Professor Elizabeth K. Meyer further develops this connection between landscape architects and land artists, "...the most powerful influences on landscape architects attempting to bridge ecological environmentalism and design expression were the artists known as environmental artists, earth artists, or site artists."[14] George Hargreaves and Michael Van Valkenburgh were among the early group of landscape architects who adopted a process approach to design

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[8] Ibid, 36-39.
[9] Natalie Loveless, "*How to Make Art at the End of the World: A Manifesto for Research-Creation*" (Duke University Press: 2019), 1.
[10] Other landscape architects, such as Lawrence Halprin, were creating innovative landscapes including Halprin's Sea Ranch in Northern California. In 1962 he combined site ecology and landscape form to place buildings in harmony with topography.
[11] Meyer, "Post-Earth Day Conundrum. Translating Environmental Values into Landscape Design," 196.
[12] Ibid.
[13] John Dixon Hunt, "Foreword" in Udo Weilacher, *Between Landscape Architecture and Land Art*, (Berlin: Birkhauser, 1999), 6.
[14] Meyer, "Post-Earth Day Conundrum. Translating Environmental Values into Landscape Design," 196.

influenced by multiple sources, one of which was Smithson. Elizabeth K. Meyer describes the impact of the type of environmentally focused landscapes the pioneering group created:

> By creating places of wonder and beauty, landscapes of strong textural or scale juxtaposition, and ecological spaces of ever-changing mood and character, landscape architects provided occasions for humans to revel in the moment and to feel connected to a place. In brief, by setting a site in motion or registering changes over time, landscape architects translated their ecological environmental values into a new design language that was dynamic, fluctuating, and process oriented. The open-ended nature of this work was not completed when construction was done but constantly modified by the flow of people and natural processes through the site, contrasted with the static, idealized public landscape that accommodated human activity and natural phenomena but was not affected by them."[15]

Landscape architects took inspiration from Smithson's diverse works: process pieces like *Asphalt Rundown* (1969), *Glue Pour* (1969) and *Partially Buried Woodshed* (1970); large-scale earthworks including *Spiral Jetty* (1970), *Broken Circle-Spiral Hill* (1971) and *Amarillo Ramp* (1973); numerous critical essays including "Frederick Law Olmsted and the Dialectical Landscape"; the Site/NonSite concept; and land reclamation proposals like those for Creed Tailings Pond in Colorado (1973) and Bingham Copper Mine Pit in Utah (1973). Smithson's essays, built works and unrealized concepts all dealt with themes like entropy, time, scale, process and phenomenology.

Process Pieces

Smithson's process pieces precede his large-scale earthworks. They opened a new way of considering landscape design and function as explained by renowned landscape architect and professor, James Corner, "He didn't only think of process as producing something, but also as decaying and becoming something else. That's a very significant insight."[16] Meyer expands further on the ways landscape architects used Smithon's process works as inspiration, "A design

[15] Ibid, 203-4.
[16] Arthur Lubow, "The Anti-Olmsted," *The New York Times*, May 16, 2004, sec. Magazine, https://www.nytimes.com/2004/05/16/magazine/the-anti-olmsted.html.

proposition might set a site in motion, construct a catalyst for future change, or provide a datum against which to register change through such processes as deposition and erosion."[17] Mill Race Park (1993) in Columbus, Indiana by Michael Van Valkenburgh Associates (MVVA) is an example of this type of landscape.

Figure 2: Mill Race Park Designed by MVVA Image Credit: MVVA

MVVA created a park where nature's processes are on full display. Placed on a floodplain at the intersection of two rivers, the 32-acre park design anticipated and incorporated seasonal flooding rather than attempting to control it. The choice of hardscape materials and vegetative selections are able to withstand seasonal flooding which regularly reaches up to ten feet.[18] Mill Race Park's forms and spaces are placed in response to the river, creating a design based in "...postmodern picturesque theory, as redefined by Yves-Alain Bois and Robert Smithson…"[19]

Likewise, Hargreaves & Associates' designed landscapes like Byxbee Park in Palo Alto, Candlestick Park, and Crissy Field all employ concepts Smithson developed. In "Post Modernism Looks Beyond Itself," George Hargreaves calls out Robert Smithson's process pieces

[17] Meyer, "Post-Earth Day Conundrum. Translating Environmental Values into Landscape Design," 205.
[18] Mill Race Park, MVVA, accessed April 7, 2024, https://mvvainc.com/projects/mill-race-park.
[19] Meyer, "Post-Earth Day Conundrum. Translating Environmental Values into Landscape Design," 201-211.

for their embodiment of "the processes of time and nature."[20] Karen M'Closkey's analysis of Crissy Field's design evokes Robert Smithson's influence on George Hargreaves work:

> Hargreaves Associates' redesign of Crissy Field simultaneously brings together two very different notions of a shifting landscape: one that marks particular moments of human-induced site change over time, and another that allows natural processes to enact material change on the site.[21]

Figure 3: Crissy Field by Hargreaves & Associates.
Image Credit: Hargreaves & Jones

Crissy Field received the 2022 American Society of Landscape Architects Landmark Award for enduring transformation of a landscape. Receiving over one-million visitors per year, the site is a "city-defining landscape amenity" and "...a precedent in countless publications, lectures, and in academic studios and courses around the world."[22]

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[20] Hargreaves, 62.
[21] Karen M'Closkey, *Unearthed: The Landscapes of Hargreaves Associates* (University of Pennsylvania Press, 2013), 45.
[22] "Crissy Field: An Enduring Landmark Transformation," American Society of Landscape Architects, accessed January 3, 2023, https://www.asla.org/2022awards/5990.html.

Large Scale Earthworks

Consulting work on the Dallas-Fort Worth Regional Airport Air project in the mid-1960s changed Smithson's thinking about scale as he envisioned large earthworks visible from the air and projected into the terminal on screens. The endeavor, although not realized, laid the foundation for the design inspiration behind both the Site/Nonsite concept and his large-scale earthworks: *Spiral Jetty* (1970); *Broken Circle-Spiral Hill* (1971); and *Amarillo Ramp* (1973). These artworks provided a new way of thinking about the landscape by introducing concepts like entropy, process, and scale while also taking into account human perception and interaction with the landscape. George Hargreaves wrote powerfully about the way they reframed his understanding and approach to thinking about designed landscapes:

> Spiral Jetty, Amarillo Ramp, and Spiral Hill Broken Circle are now well-known earthworks by Robert Smithson. This was not always the case, and in 1978, while I was attending graduate school in landscape architecture, these three projects were beacons on the parched field of designed landscapes. Formally, the organization of these projects was very different from the moderns, eschewing asymmetrical balancing or relational objectives between parts (structuralism). There seemed to be a different strategy employed here, one of "open ended" organization where other elements such as water, wind, and gravity could enter and influence the landscape. This in turn, gave rise to an idea of expressing the processes of nature through open-ended vehicles of culture. For the first time I understood that designed landscapes could be extraordinarily meaningful. The Smithson works reintroduced the concept of landscape as idea - something lost in pursuit of the functional landscape - and opened a door to a world not yet fully explored and still expanding.[23]

[23] George Hargreaves, cited in "Most Influential Landscapes," *Landscape Journal* 12, no. 2 (1993), 177.

Figure 4: Robert Smithson's *Spiral Jetty* in 1970. Photo by Gianfranco Gorgoni.

Incorporating Smithson's influence and idea of "open ended" processes into his work, George Hargreaves and his colleagues, most notably Mary Margaret Jones, impacted the direction of landscape architecture at a critical time. Professor Karen M'Closkey writes:

> Hargreaves Associates' early work, among that of several other practices at this time, marks an important moment in landscape architecture: one that bridged the divide that had dominated the discipline in the 1960s and 1970s, when the emphasis on large-scale planning led to a disregard for the qualitative and experiential aspects of landscape's material and form.[24]

George Hargreaves's "open composition" design approach sought to create forms that responded to change rather than remaining fixed in the landscape. This style relied on both ecological and object based design concepts dominating the field of landscape architecture. Hargreaves developed what Elizabeth K. Meyers claims is a "new genre" bridging the two.[25]

[24] M'Closkey, *Unearthed*, 3.
[25] Meyer, "Post-Earth Day Conundrum. Translating Environmental Values into Landscape Design," 221.

Written Works

Smithson's many essays in leading art journals like *Artforum*, have had an enduring impact on landscape architecture. Particularly relevant to the field is Smithson's 1973 *Artforum* article "Fredrick Law Olmsted and the Dialectical Landscape." Written in response to the Whitney Museum of Art's 1972 exhibit on Olmsted, Smithson celebrates Olmsted's process approach to transforming a barren wasteland into New York City's Central Park and declares Olmsted America's "first earth artist." Written over 50 years ago, the Olmsted essay has inspired students of landscape architecture for generations.[26] Catherine Howett writes:

> Reading Robert Smithson's 'Frederick Law Olmsted and the Dialectical Landscape' when it appeared in Artforum in 1973 confirmed my sense that the most provocative dialogues exploring the nature and meaning of designed landscapes were taking place outside the profession of landscape architecture. Smithson's essays have still unspent energy to charge that dialogue today.[27]

Smithson was intentional about developing and using his powerful writing voice. Gary Hilderbrand explains how the artist gained visibility among a wider audience by strategically tying himself and his artwork to a renewed interest in Olmsted and the picturesque:

> Like Olmsted, Smithson sought an audience for his larger agenda. He cleverly yoked his exposure machine—art journals and catalogues [sic] —to the scholarly rehabilitation of Olmsted's career that was emerging in the 1960s and that gained in prominence during the 1970s. By embedding detailed observations on the landscape of New York's Central Park in a body of descriptions of his own art, and by chronicling adaptations he could see layered on top of the park's original constructions, Smithson broadened his reach and earned the attention of cultural critics, urban theorists, and landscape architects. He opened the door for apprehension once again—landscape architects, it seems, had almost forgotten—of the possibilities of using landscape as a medium of meaningful expression and an instrument of cultural relevance. In doing so, he increased our awareness of the physical and cultural forces that Olmsted had grasped. He demonstrated ever more clearly the forces of geomorphology, hydrology, weather, and decay. Smithson conceptualized the landscape and made concrete its phenomenological possibilities. Landscape architecture would reclaim this territory soon after, and a revitalized discourse

[26] Smithson's Olmsted essay continues to inspire students in the field of landscape architecture. It is a recommended reading for all new landscape architecture students at the esteemed Weitzmann School of Design at the University of Pennsylvania.
[27] Catherine Howett, cited in "Most Influential Books," *Landscape Journal* 10, no. 2, (Fall 1991): 184.

> would emerge from overlaps between his work and that of others who argued for the landscape's primacy.[28]

Smithson's ability to forefront landscape processes and incorporate them into a design to promote meaningful interaction with the landscape resonated deeply with landscape architects. Writing in 1998, professor Catherine Howett described Smithson's impact on landscape architecture as a profession during this time period.

> For this generation, Robert Smithson--one of the most articulate and conceptually important of the artists of the early "Earth Art" movement…represented what Olmsted had for earlier generations of landscape architecture students. Moreover, in critical ways, Smithson's built work, but even more importantly his writing, was a motherlode of ideas and insights for landscape architects and students who were excited by the environmental art movement.[29]

A frequently quoted section of the essay discusses the treatment of parks. Smithson discards the notion of a sterile and perfectly manicured park asserting: "A park can no longer be seen as "a thing-in-itself," but rather as a process of ongoing relationships existing in a physical region—the park becomes a "thing-for-us."[30]

Land Reclamation

In 1971 Smithson turned his attention to quarries and mining sites. While mining companies had begun considering how to mitigate environmental impact in the 1950s and landscape architects had been identified as agents to help,[31] Smithson was the first to advance artistic and industrial collaboration in industrial land reclamation. In the late 1960s coal strip

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[28]Gary Hilderbrand, "On Seeing," Reed Hilderbrand, 2014, accessed April 7, 2024 https://www.reedhilderbrand.com/practice/on_seeing

[29] Catherine Howett, "Ecological Values in Twentieth-Century Landscape Design: A History and Hermeneutics," *Landscape Journal* 17, no. 2 (Fall 1998): 80, https://doi.org/10.3368/lj.17.Special_Issue.80.

[30] Robert Smithson, "Frederick Law Olmsted and the Dialectical Landscape (1973)," in *Robert Smithson, The Collected Writings*, ed. Jack D. Flam (Berkeley: University of California Press, 1996), 157–75.

[31] "*Untitled Earthwork (Johnson Pit #30)*," NRIS #100006801. National Register (SeaTac, King County, Washington: National Register of Historic Places, 2021).

mining underwent a revival due to diminishing natural gas reserves and rising cost of oil. A booming steel industry at home and abroad combined with rapidly increasing populations led researchers to believe sustained demand was "inevitable."[32] During this time state governments began to enact new laws aimed at addressing the environmental damage from strip mining. At the same time, the ecological movement was gaining influence in popular culture with the first Earth Day taking place on April 22, 1970.

Responding to these forces, Smithson believed artists could play a major role in reforming scarred industrial sites.[33] He wrote: "Across the country there are many mining areas, disused quarries and polluted lakes and rivers. One practical solution for the utilisation of such devastated places would be land and water re-cycling [sic] in terms of Earth Art."[34] With the closing of Dwan Gallery in 1971, Smithson was seeking a new way forward as a working artist and looked to mining companies as potential benefactors. He wrote letters to many companies with messages centered around the positive synergy artists and industry could have to address reclamation with claims such as:

> Art can become a physical resource that mediates between the ecologist and the industrialist. Ecology and industry are not one-way streets, rather they should be crossroads. Art can help to provide the needed dialectic between them. A lesson can be learned from the Indian cliff dwellings and earthwork mounds. Here we see nature and necessity in consort.[35]

Finally, The Minerals Engineering Company of Denver agreed to engage Smithson to create a "Tailings Pond" for a mine in Creede, Colorado. Smithson's drawings for the project reveal he did not intend to disguise the former use of the site; rather, he intended to acknowledge

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[32] *A History of Appalachian Coal Mines, in Legal Problems of Coal Mine Reclamation: A Study in Maryland, Ohio, Pennsylvania and West Virginia* (U.S. Govt. Printing Office, 1972), 17-18.
[33] Robert Morris would complete the first artistic and industrial collaboration at a mining site in 1979 at the Earthworks Symposium with *Untitled Earthwork (Johnson Pit #30),* the first earthworks 1970s era site to be listed on the National Register of Historic Places in 2021. The symposium organizers give inspiration credit to Smithson.
[34]Robert Smithson, "Untitled 1971" in *Robert Smithson: The Collected Writings*, ed. Jack Flam, 376.
[35] Ibid.

the extraction and use of the land for industry. “His projects for tailings would have stood as memorials to industrial disruption of the landscape, and as provocations to contemplate the efficacy and necessity of our resource development policies.”[36] The Creede project “confirmed his idea that the artist could become a functional worker within society, changing the socio-economic basis of art by restoring it to an everyday function within society, and making an art that restored to the common man his sense of place in the world.”[37] Unfortunately, Smithson passed away before realizing the Creede earthwork. However, his vision would live on in a new generation of artists.

In the early 1980s undergraduate art students began studying landscape architecture as a way to further investigations and interests in Land art.[38] Perhaps no single student carried out Smithson’s vision for artistic collaboration with industry more successfully than Julie Bargmann. An undergraduate sculpture major at Carnegie Mellon University, Bargamnn went on to receive her M.L.A. from the Harvard Graduate School of Design in 1987. After graduation she worked for Michael Van Valkenburgh before pursuing teaching and eventually opening her own small studio, D.I.R.T.

In an interview with *The New York Times*, the “Queen of Slag” stated: “I have always loved how things are made, so I can’t help but bring up the major influence in my work, the artist Robert Smithson, one of the Earthworks artists. He hammered home that the landscape is just one big, old, messy process.”[39] Her interest in “other” landscapes recalls Smithson’s own words:

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[36] John Beardsley, *Earthworks and Beyond: Contemporary Art in the Landscape* (New York: Abbeville Press, 1989), 23, 25-26.
[37] John Coplans, “Robert Smithson, The ‘Amarillo Ramp,’” *Artforum* 12, no 8 (April 1974): 39.
[38] Meyer, “Post-Earth Day Conundrum. Translating Environmental Values into Landscape Design,” 197.
[39] Tanya Mohn, “How the ‘Queen of Slag’ Is Transforming Industrial Sites,” *The New York Times*, May 30, 2022, sec. Arts, https://www.nytimes.com/2022/05/30/arts/design/julie-bargmann-landscape-architecture-industrial-urban.html.

> My own experience is that the best sites for "earth art" are sites that have been disrupted by industry, reckless urbanization, or nature's own devastation. For instance, The Spiral Jetty is built in a dead sea, and The Broken Circle and Spiral Hill in a working sand quarry. Such land is cultivated or recycled as art.[40]

Her work fulfills Smithson's desire for artists to be active in land reclamation projects, but Bargmann also advances it by advocating powerfully for social justice.

Figure 5: Vintondale Reclamation Park by D.I.R.T. Studio
Image Credit: The Cultural Landscape Foundation

Bargmann began work on Vintondale Reclamation Park in Vintondale, Pennsylvania in 1995. It was one of the first successful land reclamation projects in the United States.

Bargmann describes the groundbreaking multidisciplinary project:

> It was a perfect, multidisciplinary team of engineers, hydrogeologists, architects, artists, historians and landscape architects. We learned everything about acid mine drainage treatment to design a natural filtration system that addressed years of pollution from mine runoff. Excavators resculpted 19th-century beehive ovens used to convert coal to coke to make steel. We brought them out from behind those chain-link fences and made the science visible, beautiful. Now it's a neighborhood park alongside a historic bike trail. I mean, boom. It all came together. People started paying attention. There really weren't

[40] Smithson, "Frederick Law Olmsted and the Dialectical Landscape (1973)," 165.

> any models at that time in the U.S. From then on I could point to something in rural Pennsylvania and say, "This is totally possible."[41]

At Vintondale Bargmann was focused on "making remediation processes visible"[42] echoing Smithson's vision to work with the effects of industry rather than mask them. A series of trapezoidal pools served as filters of toxic acid mine drainage. The initial pool was filled with polluted orange water and grew progressively cleaner as it moved through gravity fed ponds surrounded by filtering vegetation.[43] Bargmann's selection as the inaugural Oberlander Prize recipient by The Cultural Landscape Foundation in 2021[44] recognizes the outstanding contribution she has made to landscape architecture with built projects, innovation and advocacy.

After several decades, the types of innovative landscapes employed by this early group of landscape architects are no longer seen as revolutionary. The concepts and motivations behind them have found their way into landscapes all over the world. Looking back to remember where the foundation for these ideas came from is key to keep moving the field forward. Afterall, "However new the circumstances may be, it is virtually impossible to create a work of art without antecedents."[45]

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[41] Ibid.
[42] D.I.R.T., "Vintondale Reclamation Park," accessed April 7, 2024, https://www.dirtstudio.com/work/vintondale-reclamation-park.
[43] Ouroussoff, Nicolai, "The Greening of the Waterfront," *The New York Times*, April 1, 2010, sec. Arts, https://www.nytimes.com/2010/04/02/arts/design/02bridge.html.
[44] The Cultural Landscape Foundation, "Julie Bargmann," accessed April 7, 2024.
[45] Geoffrey Jellicoe and Susan Jellicoe, *The Landscape of Man: Shaping the Environment from Prehistory to the Present Day*, Revised and enlarged edition (New York, N.Y: Thames and Hudson, 1987), 7.

METHODOLOGY

Submissions to the National Register must follow a general format. Each nomination is individually crafted to best represent relevant historical forces and characteristics of the building, object, or site in order to prove significance at local, state or national levels. This thesis seeks nomination for *Spiral Jetty* under Criterion C on National Park Service form 10-900 "Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction." Three areas of significance were included: work of a master, high artistic value to landscape architecture and an influential example of the Land art genre.

Nominations to the National Register of Historic Places require owner approval before being forwarded to the National Register of Historic Places for review. *Spiral Jetty* is unique because the State of Utah owns the land *Spiral Jetty* lies on and Dia Art Foundation, holds the lease and owns the artwork. Before beginning the nomination process, the State Historic Preservation Office and local stakeholders were contacted. While Dia Art Foundation is the primary steward for *Spiral Jetty*, the foundation relies on local partners for assistance in managing the site.[46]

The National Register of Historic Places, administered by the National Park Service, was created by the National Historic Preservation Act in 1966 to "identify, evaluate, and protect

[46] At the time of inquiry, local representatives included: Gretchen Dietrich of Utah Museum of Fine Arts, Bonnie Baxter, Ph.D. at Westminster College and Laura Vernon from the Department of Natural Resources. Over the course of two months, these stakeholders were contacted and each expressed support for a nomination. In addition, Chris Merritt, Utah's Preservation Officer, and Cory Jensen, National Register and Survey Coordinator at the State Historic Preservation Office, confirmed eligibility and provided an overview of the process. Once consensus was determined among local partners, Dia was contacted with the proposal. After internal discussion and outreach to the Holt/Smithson Foundation, approval was formally granted to move forward with the nomination in March of 2023. Partners expressed a desire to be appraised of the process and regular updates were given. Final Nomination was reviewed by local partners, Holt/Smithson Foundation and Dia Art Foundation.

America's historic and archeological resources." A listing in the National Register is an honorary designation to recognize the important role historic buildings and landscapes have in our society. While the designation itself does not limit property owner stewardship of designated historic sites, it can open opportunities for funding to care for historic assets. To be listed in the National Register a site should meet a 50 year threshold and specific criteria for eligibility. The National Park Service states, "It must represent a significant part of the history, architecture, archeology, engineering, or culture of an area, and it must have the characteristics that make it a good representative of properties associated with that aspect of the past."[47] The site must retain a strong level of historic integrity. Guidelines are provided to assess seven aspects of integrity:

1. Location
2. Design
3. Setting
4. Materials
5. Workmanship
6. Feeling
7. Association

Cultural landscapes were added in the 1980s. According to the National Park Service, a cultural landscape is "a geographic area, including both cultural and natural resources and the wildlife or domestic animals therein, associated with a historic event, activity, or person, or exhibiting other cultural or aesthetic values."[48] When evaluating a cultural landscape, thirteen characteristics should be considered:

1. Archeological Sites
2. Buildings and Structures
3. Circulation
4. Cluster Arrangement
5. Constructed Water Features
6. Cultural Traditions
7. Land Use
8. Natural Systems and Features
9. Small-Scale Features
10. Spatial Organization
11. Topography
12. Vegetation
13. Views and Vistas

[47] US Department of the Interior, *How to Apply National Register Criteria for Evaluation*, National Register Bulletin, 1997, (Washington, DC, 7).
[48] National Park Service, "Cultural Landscapes," Accessed August 3, 2024, https://www.nps.gov/subjects/culturallandscapes/understand.

1. Nomination Preparation Sources:

    a. National Register of Historic Places Best Practices Review, Preparing a Concise Significance Statement
    b. National Register Bulletin, How to Apply the National Register Criteria for Evaluation
    c. National Register Bulletin No. 18 How to Evaluate and Nominate Designed Historic Landscapes
    d. National Register of Historic Places and National Historic Landmarks Program Consolidated and Updated Photography Policy 2024
    e. Substantive Review Checklist
    f. Technical Review Checklist
    g. Utah Division of State History Guide for Preparing National Register Nominations

2. Research Sources | Wide range of materials were consulted in preparing the nomination

    a. Academic Journals
    b. Art Journals
    c. Books
    d. Interviews and Email Communication (for background information)
    e. Newspapers
    f. Smithsonian Archives of American Art
    g. University of Utah J. Willard Marriott Digital Photo Archives
    h. Website Documentation and Research from Holt/Smithson Foundation

3. Site Inventory | Biological Attributes

    a. Vegetation and plant communities
        i. Field observation and plant identification
    b. Oolitic Sand
    c. Bitumen

4. Site Inventory | Cultural

    a. Circulation (social trails, automobile)
    b. Historical remains
    c. Signage
    d. Small scale features
    e. Views and vistas

5. Site Inventory | Physical Attributes
    a. Geology: Rock specimen and size
    b. Hydrology: Great Salt Lake Shoreline elevation
    c. Topography: Slope, aspect and elevation

6. Precedents | Similar nominations to the National Register of Historic Places
    a. "Untitled Earthwork: (Johnson Pit #30)," NRIS #100006801. National Register (SeaTac, King County, Washington: National Register of Historic Places, 2021).
    b. "Black Rock Site," NRIS #100006332. National Register (Tooele County, Utah: National Register of Historic Places, 2021).

The nomination was prepared with guidance from Cory Jensen at the Utah State Historic Preservation Office and Kirk Huffaker at Kirk Huffaker Preservation Strategies. Multiple drafts were reviewed and modified. Holt/Smithson Foundation and Dia Art Foundation collaborated on final draft revisions and edits. A final package includes the document, digital images and pdf of relevant source citations. If/when approved, the Utah State Historic Preservation Office will package the nomination and submit it to the National Park Service for a 60 day review period. A listing in the National Register of Historic Places is expected in late 2024.

United States Department of the Interior
National Park Service

National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in National Register Bulletin, *How to Complete the National Register of Historic Places Registration Form.* If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions.

1. **Name of Property**
Historic name: Spiral Jetty
Other names/site number: _____
Name of related multiple property listing**:**
_____
(Enter "N/A" if property is not part of a multiple property listing
N/A

2. **Location**
Street & number: N/A
City or town: N/A State: UT County: Box Elder County
Not For Publication: [ ] Vicinity: [X]

3. **State/Federal Agency Certification**

As the designated authority under the National Historic Preservation Act, as amended,

I hereby certify that this _____ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60.

In my opinion, the property ____ meets ___ does not meet the National Register Criteria. I recommend that this property be considered significant at the following level(s) of significance:

X national **statewide** **local**
Applicable National Register Criteria:

A **B** **X C** **D**

/SHPO

Signature of certifying official/Title: **Date**

Utah Division of State History/Office of Historic Preservation

State or Federal agency/bureau or Tribal Government

In my opinion, the property ___ meets ___ does not meet the National Register criteria.

Signature of commenting official: **Date**

Title : **State or Federal agency/bureau or Tribal Government**

_

4. **National Park Service Certification**

I hereby certify that this property is:

___ entered in the National Register

___ determined eligible for the National Register

___ determined not eligible for the National Register

___ removed from the National Register

___ other (explain:) _____

_____

Signature of the Keeper Date of Action

5. **Classification**

Ownership of Property

(Check as many boxes as apply.)

Private: ■

Public – Local ☐

Public – State ■

Public – Federal ☐

Category of Property
(Check only **one** box.)

Building(s)	☐
District	☐
Site	☐
Structure	☐
Object	☐

Number of Resources within Property
(Do not include previously listed resources in the count)

Contributing	Noncontributing	
		buildings
1		sites
		structures
		objects
1		Total

Number of contributing resources previously listed in the National Register _____

6. **Function or Use**
Historic Functions
(Enter categories from instructions.)

RECREATION & CULTURE/ Work of Art

Current Functions
(Enter categories from instructions.)

RECREATION & CULTURE/ Work of Art

7. **Description**

Architectural Classification
(Enter categories from instructions.)

OTHER/ Land
OTHER/ Contemporary

Materials: (enter categories from instructions.)
Principal exterior materials of the property: STONE: Basalt

Narrative Description
(Describe the historic and current physical appearance and condition of the property. Describe contributing and noncontributing resources if applicable. Begin with **a summary paragraph** that briefly describes the general characteristics of the property, such as its location, type, style, method of construction, setting, size, and significant features. Indicate whether the property has historic integrity.)

Summary Paragraph

Spiral Jetty is a large-scale site-specific earthwork created in 1970 by American artist Robert Smithson (1938-1973). It lies on the lakebed of the Great Salt Lake at Rozel Point on the northeastern shore in an uninhabited region of Box Elder County, Utah. The earthwork is located 15.8 miles southwest of the Golden Spike National Historical Park (GSNHP) and 103 miles northwest of Salt Lake City. Composed entirely of locally sourced materials, the 1,500-foot-long form extends northwest from the shore of Rozel Point in a 15-foot-wide span before rotating inward twice in a counterclockwise spiral. To create his earthwork, Smithson directed earthmoving equipment operators to relocate over 6,650 tons of basalt boulders and soil from the shoreline and hillside. Visible boulder circumferences vary greatly with an average of four feet.[1] *Spiral Jetty* rises approximately three feet above the lakebed.[2] Oolitic sand fills the path of the jetty and surrounds the earthwork except when rain, snow or salt crystals fill in surrounding shallow depressions. Low vegetation begins near the shoreline where the earthwork extends from the shore and continues eastward up the slope. The nomination boundary is the ten-acre leased parcel in the meander zone[3] of the Great Salt Lake. The boundary fully encompasses the earthwork and is indiscernible from the surrounding landscape. The year of significance for *Spiral Jetty* is 1970.

[1] Site observation and measurements by author May 14, 2024.
[2] Ibid.
[3] The "meander zone" is the area of the lakebed between the high-water mark of 4212'' and current lake level. Lands in this zone fall under jurisdiction of the Utah Department of Natural Resources, Forestry, Fire and State Lands Division.

[Figure 1] Robert Smithson's *Spiral Jetty* at time of construction in 1970. Photo by Gianfranco Gorgoni.

Narrative Description

Robert Smithson's *Spiral Jetty* (1970) is one of the most significant artworks by an American artist made in the latter half of the twentieth century. Recognized locally, regionally, nationally and internationally, *Spiral Jetty* is foundational in the history of art and landscape architecture. The earthwork is an icon with deep connections to the Great Salt Lake and surrounding environs.[4] At Rozel Point on the northeastern shore of the Great Salt Lake, Smithson reconfigured existing physical aspects of the landscape, such as white salt crystals, black basalt rocks, red water, the mirror-like property of the lake and spatial quality of the site's geography in the construction of a 1,500-foot-long and 15-foot-wide spiral-shaped jetty. It extends nearly 600 feet from the shore before curving counterclockwise twice. The largest coil spans just over 200 feet in diameter with an average of 30 feet between coils.

The nomination site boundary is defined by the ten-acre leased parcel obtained by Robert Smithson and Nancy Holt, his wife and fellow artist, from the Utah Land Board in 1970.[5] The parcel encompasses the

[4] In 2017 the Utah legislature voted to formally recognize *Spiral Jetty* as an official symbol of the state by designating it as a state work of land art.
[5] Smithson and Holt signed a 20-year Special Use Lease Agreement to construct an "earth work sculpture" in the meandering zone of the Great Salt Lake with the Utah Division of State Lands. They agreed to pay $100 per year for the 10-acre parcel. Original lease terms began January 1, 1970 and ended December 31, 1989. Source: Utah State, Division of State Lands, "Special Use Lease Agreement No. 222," April 9, 1970.

entire earthwork and a portion of the hillside up to the high-water line of 4,212 feet. The boundary is unmarked and indiscernible from the surrounding landscape. Eastward from the boundary's edge, the basalt strewn hillside continues rising, reaching a peak of 4,567 feet. The site is actively managed by Utah Division of Forestry, Fire and State Lands (FFSL) at the Department of Natural Resources (DNR), Dia Art Foundation, Holt/Smithson Foundation, Utah Museum of Fine Arts, and Great Salt Lake Institute at Westminster University.

Spiral Jetty lies on ancient deposits of mudflats which settled around the shore as Lake Bonneville retreated, resulting in the Great Salt Lake. The primary structural material is basalt rock, with secondary rock present with limestone. The vesicular basalt was forged from quickly cooling ancient lava flows from shield volcanoes. The basalt surface is covered with small cavities caused by gas bubbles in the crystallizing lava. While the basalt is primarily black or dark gray, some boulders are interbedded with gray/tan limestone. The boulders vary greatly in size with the exposed portion measuring anywhere from less than a foot up to two feet high. Width also varies with an average circumference of approximately four feet. In general, larger boulders are located at the edges of the earthwork with a great variety of sizes in the center. It appears over time many basalt boulders have broken down into smaller pieces. While considered a durable and dense material, basalt is also subject to erosion. The earthwork rises approximately three feet above the lakebed in a gradual slope. Oolitic sand fills the surface of *Spiral Jetty* and makes up a large part of the surrounding landscape. Playa underlies the oolitic sand layer and the two often mix when the surface is disturbed. Great Salt Lake ooids are elongated or egg-shaped grains of sand. They are biological in nature, created chemically when mineral deposits like calcium carbonate and magnesium carbonate "...precipitates in the lake and coats tiny specks of material, typically mineral grains or brine shrimp fecal pellets, in areas where the water is agitated, commonly just offshore in the wave zone."[6] Over time the mineral layers create the oolitic sand.

Dispersed among basalt boulders on the hillside of the nomination boundary, vegetation ranges from a few inches tall up to approximately five feet in height. Species able to survive the harsh environment are all highly salt and drought tolerant. Primary species identified include *Salicornia utahensis* and *Salicornia rubra* (pickleweed), *Artemisia tridentata* (big sagebrush), *Allenrolfea occidentalis* (iodine bush), *Suaeda calceoliformis* (seepweed), *Distichlis spicata (L.) Greene* (saltgrass), and *Helianthus annuus* (sunflower). In addition, the invasive *Bromus tectorum* (cheatgrass) is abundant in the area. Vegetation on *Spiral Jetty* is minimal, limited to the section that connects to the mainland.

The easternmost edge of the nomination boundary includes a small portion of a graded but unpaved parking lot. Aerial imagery reveals a narrow social trail descending from the parking area to *Spiral Jetty*. The period of significance is 1970, the year *Spiral Jetty* was conceived by Robert Smithson and constructed.

Larger Setting

Adjacent to the nomination boundary on the east is privately owned ranch land. Parcel ownership has transferred over the years, but public access for parking and viewing *Spiral Jetty* from the hillside has remained consistent since the time of construction in 1970. Circulation patterns reveal a social trail leading east from the parking lot to an unauthorized small concrete platform with granite stone pillar and engraved plaque describing *Spiral Jetty* installed as an Eagle Scout project in 2014 by Griffin Southern.

[6] Davis, Gwynn and Rupke, "Commonly Asked Questions About Utah's Great Salt Lake and Ancient Lake Bonneville," Utah Geological Survey (Salt Lake City: Utah Department of Natural Resources, 2022), 13.

The trail continues up the hillside and provides an excellent viewpoint for observing *Spiral Jetty*. Another trail extends north from the parking lot. It is approximately six feet wide and appears to be used for ATV vehicles. Immediately south of the parking lot is the stone foundation of a small homestead measuring approximately 12 to 18 inches high and 18 by 30 feet long. Land patent records show it was granted in 1913[7] and this period coincides with oil exploration at Rozel Point. An unauthorized rudimentary park style bench of wood and composite 2x4s is near the high waterline overlooking *Spiral Jetty* to the northwest (date unknown).

About half a mile south of *Spiral Jetty* is Rozel Point where a jetty once used for oil exploration extends into the lake and terminates at a series of wood piers and the remains of an old wooden structure. In addition, a few scattered pieces of small industrial mining equipment remain. Pools of black, sticky bitumen coat the surface in several areas. The greater viewshed at Rozel Point is described by *Spiral Jetty* scholar, Hikmet Sidney Loe:

> Outward from the hilltop rocks, the pluvial lake basin stretches for miles in all directions, Rozel Bay gently curves around the point in either direction from the *Spiral Jetty*. In a scan of the landscape from west to east, the horizon of the flat, mirrorlike lake is interrupted by the rise and fall of landmasses: Dolphin Island sits in front of the western shores of the lake and the Hogus Mountains; Cub Island accompanies the much larger Gunnison Island; Lakeside marks the northern end of the Lakeside Mountains; Carrington Bay with Hat Island and Carrington Island appear just to the east; then in quick succession Stansbury Island, Antelope Island, and the Wasatch Range each rise up.[8]

The shoreline of Great Salt Lake's northern arm constantly fluctuates according to direct precipitation and evaporation rates. Today it lies approximately one half-mile west of *Spiral Jetty.* The high salinity supports halophiles, salt-tolerant organisms with carotenoid pigments that cause the water to change color from pink to purple. Biologist Bonnie Baxter describes the microbes, "Some of the species get a little extra energy from the sun… So sometimes at noon, you'll see the water deepen its red color."[9] When the lake reaches saturation level for sodium chloride, a white salt crust forms at the water's edge.

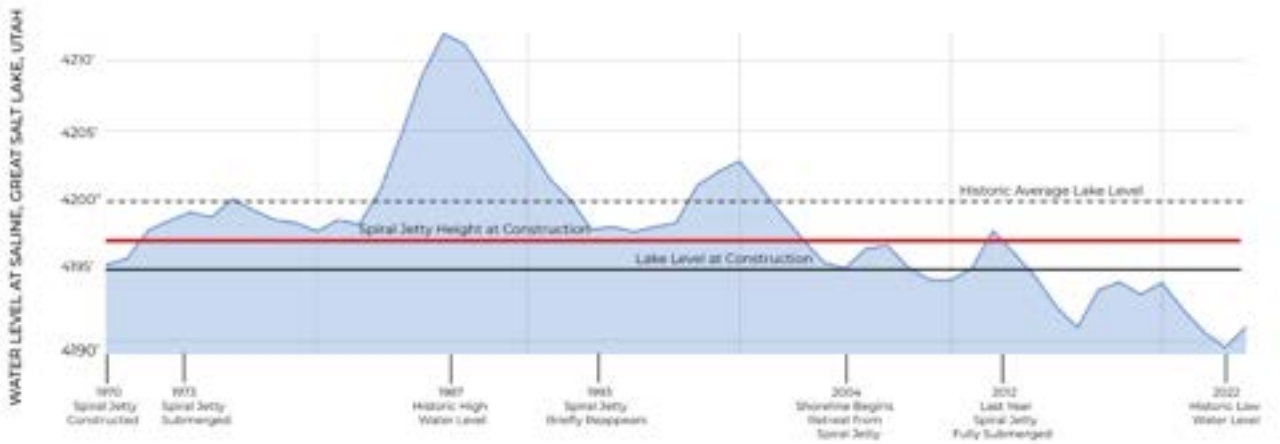
Spiral Jetty Present Condition

The Golden Spike Loop Road, the unpaved county road to Rozel Point, begins immediately west of the GSNHP, turning into Rozel Flats Road as the loop veers to the northwest. The route to Rozel Point cuts through 15.8 miles of private, unirrigated grasslands and sagebrush used as ranchland. The public road is marked with simple metal signs listing the number of miles to *Spiral Jetty* at the beginning of the road and at two key junctions. The road is well maintained and accessible by standard vehicles at all times of day.

[7] Lyman R. Palmer (Box Elder County, Utah) homestead patent no. 339972; "Land Patent Search," digital images, General Land Office Records, https://glorecords.blm.gov/details/patent/default.aspx?accession=339972&docClass=SER&sid=rpwzttv3.qah#patentDetailsTabIndex=0, accessed June 14, 2024.
[8] Hikmet Sidney Loe, *The Spiral Jetty Encyclo: Exploring Robert Smithson's Earthwork through Time and Place* (Salt Lake City: University of Utah Press, 2017), 223.
[9] Chau Tau, "Great Salt Lake's Earthen Spiral," *Science Friday*, March 15, 2016, https://www.sciencefriday.com/articles/great-salt-lakes-earthen-spiral/.

The visible quantity of basalt rocks and limestone comprising *Spiral Jetty* has decreased over time. Decades of wave action pushing against the shore depositing sediment[10] is likely the primary driver. Increased visitation numbers may also be contributing to change. While media coverage of *Spiral Jetty's* reemergence in the early 2000s as well as the Los Angeles Museum of Contemporary Art's 2004 major Smithson retrospective likely encouraged visitation, social media is the suspected primary driver today.[11] During the COVID-19 pandemic a car counter installed at the site documented over 700 cars in one day.[12] Climate change, walking on the jetty and visitor removal of rock are suspected contributing factors to erosion.

The most striking visual change at the site is *Spiral Jetty's* disconnection from the lake's fluctuating shoreline. Human consumption for agriculture (63%), mineral extraction (14%), constructed wetlands (10%) and a booming population and economy along the Wasatch Front (12%) have indirectly lowered the lake by an estimated 11 feet and cut volume by 50% since 1847 when pioneer settlers arrived and began diverting water in the region.[13] A prolonged drought and rising temperatures have also contributed to the lake's current state. In 2022 scientists warned the south arm of the Great Salt Lake was on the verge of an ecological collapse as salinity levels reached 19%, nearly too high to support brine shrimp and brine flies. The railway causeway berm was raised four feet in February of 2023, severing the lake in two in a desperate effort to protect the endangered ecosystem. Many researchers feel the lake's disappearance is inevitable without drastic cultural changes. Bonnie K. Baxter, Director of the GSLI at Westminster University described the situation in November 2023, "We are sitting on the precipice of an ecosystem collapsing. I just can't say it any other way. We are so close you can feel it."[14]



[Figure 2] Great Salt Lake Key Water Levels (taken each April at Saline near Rozel Point).
Source: USGS Great Salt Lake Hydro Mapper, https://webapps.usgs.gov/gsl/data.html.

[10] Site observation by the author on November 13, 2023 reveals gradual build-up of sand [Photograph 13].
[11] Instagram, "#SpiralJetty" search yielded 21,498 results, accessed January 4, 2024, https://www.instagram.com/explore/tags/spiraljetty/.
[12] Gabriella Angeleti, "Surge in Visitors to Spiral Jetty Through the Pandemic Leads to Plans for More Amenities and Ecological Awareness," *Art Newspaper*, May 27, 2021, https://www.theartnewspaper.com/2021/05/27/surge-in-visitors-to-spiral-jetty-through-the-pandemic-leads-to-plans-for-more-amenities-and-ecological-awareness
[13] Sarah Null and Wayne Wurtsbaugh, "Water Development, Consumptive Water Uses, and Great Salt Lake," in *Great Salt Lake Biology: A Terminal Lake in a Time of Change*, ed. Bonnie K. Baxter, Jaimi K. Butler (New York: Springer Cham, 2020), 7.
[14] Peter O'Dowd, "Collapse of Utah's Great Salt Lake 'So close you can feel it'" WBUR, November 7, 2023, "https://www.wbur.org/hereandnow/2023/11/07/great-salt-lake-utah-crisis.

Over the past several years, Holt/Smithson Foundation has worked to raise *Spiral Jetty* as one representation of climate change.[15] The earthwork is a stark reminder and warning of the devastating effects human impact can impose on a closed system. The Foundation teamed with arts organizations around the world to create the World Weather Network. The Network is "A worldwide network of artists, writers and communities reporting on their weather and our climate." The purpose is to encourage climate conversations around the globe through various art forms.[16]

Ownership and Stewardship

Spiral Jetty lies on state-owned land, defined by the Utah legislature as "those lands lying below the ordinary high-water mark of navigable bodies of water at the date of statehood"[17] The lakebed of the Great Salt Lake is actively managed by the DNR's Division of FFSL. Ownership of *Spiral Jetty* was gifted from Nancy Holt and the Estate of Robert Smithson to Dia Art Foundation in 1999.[18] When Smithson created *Spiral Jetty* in 1970, no institution existed to steward earthworks of such a great scale. Smithson's 1971 letter to Mark H. Crystal at Utah Division of State Lands, requesting a perpetual lease, suggests future institutional ownership as a possibility. Just three years later, Dia Art Foundation was created to provide stewardship for these large works and "help artists achieve visionary projects that might not otherwise be realized because of scale or scope."[19] In addition to *Spiral Jetty*, Dia Art Foundation owns and stewards works by several other prominent Land artists including Nancy Holt and Walter De Maria.

Today Dia Art Foundation holds a "Special Use Lease Agreement" with the DNR's Division of FFSL, allowing the foundation to manage and maintain *Spiral Jetty*.[20] Dia Art Foundation and FFSL maintain an active affiliation, with FFSL assigning representatives to attend annual partner meetings. In 2012, Dia Art Foundation enlisted the Utah Museum of Fine Arts at University of Utah and the Great Salt Lake Institute at Westminster College as local partners in actively stewarding the site.[21] The Utah Museum of Fine Arts ensures that *Spiral Jetty's* cultural reputation is upheld locally and promotes the exceptional significance of the artwork within Utah. Great Salt Lake Institute advises on environmental issues, site maintenance, and accessibility pertaining to Spiral Jetty. This collective stewardship model was further expanded in 2018 with the partnership of the newly formed Holt/Smithson Foundation, which is dedicated to advancing the creative legacies of artists Nancy Holt and Robert Smithson. In addition, intellectual property pertaining to *Spiral Jetty* is closely safeguarded by the Foundation. While copyright of the earthwork *Spiral Jetty* is shared with Holt/Smithson Foundation and Dia Art Foundation, all other works, including drawings relating to the earthwork *Spiral Jetty*, are solely with the Foundation. Through partners' respective missions and expertise, they collectively assist Dia Art Foundation in preserving and maintaining the artwork, building local and international awareness, as well as sustaining the integrity of the artwork and the artist's vision.

[15] Lisa Le Feuvre, Executive Director, Holt/Smithson Foundation, interview with author, June 30, 2023.
[16] World Weather Network, "About," accessed January 29, 2024, https://worldweathernetwork.org/about/.
[17] Utah Department of Natural Resources, "About State Lands," accessed April 1, 2024, https://ffsl.utah.gov/state-lands/about-state-lands/
[18] Dan Egan, "Coming Around," *Salt Lake Tribune*, November 28, 1999, https://newspapers.lib.utah.edu/ark:/87278/s68109df.
[19] Dia Art Foundation, "About," accessed June 2, 2024, https://diaart.org/about/about.
[20] Utah Department of Natural Resources, Special Use Lease Agreement 300-00050 (Renewal), October 19, 2016.
[21] Glen Warchol, "Agreement Reached to Protect Utah's Iconic Spiral Jetty," *The Salt Lake Tribune*," January 12, 2003. https://archive.sltrib.com/article.php?id=53288798&itype=CMSID.

Original Condition at Time of Construction in 1970

In 1970 the unpaved road to Rozel Point began immediately west of the newly constructed GSNHP. Historic oil production efforts provided an access road through the remote landscape and private ranchland.[22] A barbed wire lined gate fitted with a "No Trespassing" sign led to a rocky and ungraded road that was difficult to navigate.[23] No signs pointed the way to Rozel Point. The view through private ranchlands around Promontory remained basically unchanged from the construction of the Transcontinental Railroad in 1869. The road passed through a landscape of grassland and sagebrush. Closer to Rozel Point a scattering of discarded machinery littered the sides of the road. A 1971 map drawn by Smithson notes an "old Army duck" and "shack" as key indicators to locate *Spiral Jetty*.[24] At Rozel Point Smithson noted "countless bits of wreckage," a pair of "dilapidated shacks," "pumps coated with black stickiness" and a "hut mounted on pilings."[25] From Rozel Point to the *Spiral Jetty* site, the road was a narrow horse trail.[26]

Smithson placed the earthwork in what he considered to be an entropic landscape where it would change in appearance with fluctuating atmospheric and lake conditions. According to construction drawings and lease description, the earthwork composed of "mud, salt crystals, rocks, water,"[27] rose three feet from the lakebed with approximately twelve inches of rock and dirt exposed above the red tinted water [Figure 10]. The walking surface of *Spiral Jetty* was composed of soil from the adjacent hillside and basalt and limestone boulders. The basalt boulders also lined the sides of *Spiral Jetty*, designed to encourage the accumulation of white salt crystals [Figure 22]. Just months after construction the earthwork was temporarily submerged by seasonal inflow of water to the Great Salt Lake from snow melt in the Wasatch Range to the east. By late summer evaporation caused the lake to recede, exposing rocks covered entirely in layers of white salt crystals [Figure 23]. The crystals were formed of halite (sodium chloride) and cubic or hopper in formation. They could be over an inch long, formed in masses, and took on a white or pink hue depending on algae in the brine [Figure 24].[28] Smithson described them after a site visit in 1971, "There were various types of salt crystal growth–sometimes the crystals take the form of a perfect square. Then, at other times, there is a different kind of mineral that looks like wax dripping on the rocks."[29]

[22] The road is one of only public access points for the north shore. For many years the road has been used by researchers at the Great Salt Lake Institute at Westminster College. Scientists have been monitoring the Great White Pelican and conducting research for NASA on unique ecological characteristics of the area which resemble conditions on Mars. Jaimi K. Butler, interview with author, October 5, 2023.
[23] Bob Phillips in Hikmet Sidney Loe, *The Spiral Jetty Encyclo: Exploring Robert Smithson's Earthwork through time and place,* 221.
[24] Lytle Shaw, "Smithson, Writer," in *Robert Smithson Spiral Jetty*, ed. Lynne Cooke and Karen Kelly. (Berkeley: University of California Press, 2005), 117.
[25] Robert Smithson, "The Spiral Jetty," in *Robert Smithson, The Collected Writings*, ed. Jack D. Flam (Berkeley: University of California Press, 1996), 145-146.
[26] Loe, *The Spiral Jetty Encyclo: Exploring Robert Smithson's Earthwork through time and place, 221.*
[27] Smithson, "The Spiral Jetty," 149.
[28] Davis, Gwynn and Rupke, "Commonly Asked Questions About Utah's Great Salt Lake and Ancient Lake Bonneville," 15.
[29] Robert Smithson, "...The Earth, Subject to Cataclysms, Is a Cruel Master," Interview with Grégoire Müller (1971), in *Robert Smithson, The Collected Writings* ed Jack Flam, 259, (Berkeley: University of California Press, 1996).

Historic Setting

The Great Salt Lake lies in the eastern portion of the mostly flat and open expanse of the Basin and Range physiographic province at a historic elevation of 4,200 feet. Mountains in the province are remnants from massive fault rocks from Precambrian (570+ million years ago) and Paleozoic Epochs (570-240 million years ago). The Great Salt Lake Desert lies to the west while the Wasatch Range, part of the Middle Rocky Mountain province, rises steeply to the east reaching elevations over 11,000 feet. The Great Salt Lake is the ancient remnant of prehistoric Lake Bonneville which was formed during the Pleistocene era. It is the largest saline lake in the Western Hemisphere and part of the Great Basin Watershed. Snow melt and rainwater fill rivers and tributary streams to the east before gathering into the Bear, Weber and Jordan Rivers which flow into the Great Salt Lake, bringing with them rich mineral deposits. The terminal lake's wide and shallow topography results in high evaporation rates and widely fluctuating lake levels.[30] With "every one-foot increase or decrease in lake level, about 70 square miles of lakebed is inundated or exposed."[31]

West of the northern Promontory Range on the northeastern shore lies Rozel Point. Composed of Tertiary rocks, the peninsula of interbedded limestone and black basalt extends south. Ancient deposits of soft clays surround the peninsula on the east, south and west.[32] The area of Pliocene and Quaternary volcanic rock was formed by lava flows from shield volcanoes which once covered the area.[33] Located south of Rozel Point, just offshore, are naturally occurring tar seeps where "thick, black, tar-like asphaltic oil has flowed….for hundreds, if not thousands of years."[34] The oil originates from fractures and fissures in a 2-3 foot porous basalt layer that acts as a reservoir below the lake bed.[35] The first documented attempt to extract oil was in 1896.[36] Oil exploration continued off and on through the 1970s even though the extraction and refining process was very costly and difficult.[37] When Smithson arrived in 1970 decades of old equipment littered the area in and around the oil field. A 1963 Geological report noted basalt boulders "heavily" coated in oil along the shore near the oil field. Years of exploration led to uncapped wells contaminating the site.[38]

The area surrounding *Spiral Jetty* is uninhabited and used as grazing for livestock. The land itself has changed very little, but the ecology of the Great Salt Lake was altered dramatically by the railroad. Less than 16 miles from *Spiral Jetty* lies the GSNHP. At this site on May 10, 1869, the Union Pacific and

[30] Lloyd H. Austin, "Problems and Management Alternatives Related to the Selection and Construction of the West Desert Pumping Project," in *Great Salt Lake: An Overview of Change*, ed. J. Wallace Gwynn (Salt Lake City, Utah: Utah Department of Natural Resources, 2002), 305.
[31] Davis, Gwynn and Rupke, "Commonly Asked Questions About Utah's Great Salt Lake and Ancient Lake Bonneville," 4.
[32] A. J. Eardley, *Oil Seeps at Rozel Point*, Utah Geological and Mineralogical Survey Special Studies no. 5 (Salt Lake City: University of Utah, 1963), 5.
[33] Utah Geological Survey, "Volcanic Hazards," accessed November 20, 2023, https://geology.utah.gov/hazards/volcanoes/.
[34] Gilbert L. Hunt, Thomas C. Chidsey, "Rozel Point Oil Field, Box Elder County, Utah: Geology, Development History, and Cleanup," in *Great Salt Lake: An Overview of Change*, ed. J. Wallace Gwynn (Salt Lake City, Utah: Utah Department of Natural Resources, 2002), 254.
[35] Eardley, *Oil Seeps at Rozel Point*, 5.
[36] Hunt and Chidsey, "Rozel Point Oil Field, Box Elder County, Utah: Geology, Development History, and Cleanup," 254.
[37] Ibid., 254-255.
[38] Eardley, *Oil Seeps at Rozel Point*, 5.

Central Pacific railroad lines[39] met in the "wedding of the rails."[40] The entire nation celebrated this engineering feat that finally connected the nation by rail. Initially, the route moved through the Promontory Mountains and followed the curved shore of the lake to the north. In an effort to save time and money, the Lucin Cutoff was constructed along the southern tip of the Promontory Mountains in 1904. The historic site at Promontory was now bypassed and the rails removed in 1942 for use during World War II.[41] The Lucin Cutoff included "a twelve-mile wooden trestle spanning the deepest part of Great Salt Lake."[42] The wooden structure required significant maintenance and by 1959 it was replaced with a solid rock and earth causeway with two culverts allowing small boats and water to move between the two arms.[43] While the trestle had allowed an exchange of water, the causeway divided the lake into what would be referred to as north and south arms. The north arm receives no direct freshwater inflow from tributary rivers, creating a hypersaline environment that supports "carotenoid pigment-containing microorganisms"[44] that tint the water rosy pink or red.

Historic Integrity Discussion

Spiral Jetty retains an overall excellent level of historic integrity. The location at Rozel Point has not changed. The primary material, basalt rock and limestone, is historically consistent. However, comparison of historic photos [Figure 23] to current conditions [Photograph 11] reveals a decrease in the quantity of visible basalt. In addition, soil originally used to create the path of *Spiral Jetty* has been fully covered by oolitic sand unless disturbed when it mixes with lake's playa. In spite of these changes, it still has good integrity of materials. When considering design intent of the artist, both the spiral form and the locations for viewing the earthwork are significant and retain high levels of integrity. In his 1970 interview with Paul Toner, regarding *Spiral Jetty*, Smithson stated: "My intention is to arrest a moment in the peripheral circumference area, and relate it to a central point."[45] The spiral form accomplishes this and is clearly visible today. Scale was also a key design consideration. Smithson designed *Spiral Jetty* to be viewed from the earthwork, the shore overlooking it, and from the air. Each scale alters appearance and experience for the viewer. In his essay "The Spiral Jetty," Smithson explains, "Size determines an object, but scale determines art."[46] The three scales he intended are all accessible today. Aerial access has been widely expanded with the advent of drone photography.

The endurance of *Spiral Jetty* over decades exemplifies the skill brought to bear in its design and construction. To realize his vision, Smithson contracted a foreman and crew with experience operating large earthmoving equipment used for mineral extraction activities on the Great Salt Lake. These experienced dike operators created curved formations requiring great technical skill. *Spiral Jetty's* survival after being nearly continuously submerged for decades, is evidence of this unique marriage of

[39] Congress passed the Pacific Railroads Act in 1862 which authorized the Union Pacific and Central Pacific to construct the first transcontinental line on the 32nd parallel.
[40] Less than one year before Smithson constructed the *Spiral Jetty*, the park, complete with rock visitor's center and line of rails on the original bed, was dedicated on the 100 year anniversary with 28,500 people attending.
[41] Frederick M. Huchel, *A History of Box Elder County* (Utah State Historical Society, 1999), 197.
[42] Loe, *The Spiral Jetty Encyclo: Exploring Robert Smithson's Earthwork through time and place*, 160.
[43] Union Pacific, "Striking a Balance on the Great Salt Lake." June 14, 2016, http://www.up.com/up/aboutup/community/inside_track/causeway-6-14-2016.
[44]Bonnie K. Baxter, "Great Salt Lake microbiology: a historical perspective." *International microbiology: The Official Journal of the Spanish Society for Microbiology* 21, no. 3 (2018): 83. doi:10.1007/s10123-018-0008-z.
[45] Robert Smithson, "Interview with Robert Smithson," by Paul Toner, in *Robert Smithson: The Collected Writings*, ed. Jack Flam, (Berkeley: University of California Press, 1996), 236.
[46] Smithson, "The Spiral Jetty," 147.

applied knowledge with the skill of a professional artist. Smithson personally staked out the spiral form and directed construction. At the time of construction in 1970 Smithson was already regarded as an influential and historically significant artist.

Given the distance from regional metropolitan areas and its uninhabited location, the overall setting and viewshed at Rozel Point has not changed greatly. The land use, topography and basalt boulders scattered on the hillside remain the same. Only halophilic vegetation can survive at the site so the range of species would also remain relatively consistent.[47] Over time rainfall and snowmelt have impacted soil salinity levels allowing cheatgrass to infiltrate the site.[48] A few changes have been made over the years which impact the setting. In 2005 Utah's Division of Oil, Gas and Mining led a cleanup effort with help of FFSL to remove 18 loads of debris at Rozel Point[49] including the old Army duck Smithson called out on a hand drawn map. In his essay, "The Spiral Jetty," Smithson wrote the wreckage gave him a great "pleasure." In addition, the Environmental Protection Agency led an effort to cap leaking wells, reducing the amount of flow at Rozel Point. While the oil field at Rozel Point did contribute to a feeling of industrial ruin at the site, it is approximately a half a mile south and a few items of wreckage and many old wooden pilings remain. A graded and unpaved parking lot replaced a more rudimentary parking area as a part of road improvements by Box Elder County in 2010. The lot is visible from the earthwork when facing east. Two unauthorized items also impact the historic setting, the rustic bench (date unknown) and granite marker (2014).

A more significant impact to the setting and feeling is the variable lake level. While the red water surrounding *Spiral Jetty* and crystal formations were integral to Smithson's intentions, he also envisioned the water level's rise and fall. He wanted the earthwork's appearance to be responsive to an environment affected by both humans and nature. Smithson himself states, "There are all kinds of ways of responding to it. The *Jetty* might be underwater at one time, it might not be underwater, everything is in a constant state of change. This is a stabilizing factor."[50] In this way, while the presence and absence of the lake in immediate proximity to *Spiral Jetty* has fluctuated over decades, integrity remains good if considered in the context of artistic intent. The feeling is constantly shifting; the composition of the work in relation to the lake comprehends such undulations. In 2019 Smithson scholar Gary Shapiro wrote, "Clearly, Smithson intended the work to embody a number of themes and topics concerning entropy. If new but related questions have arisen, it is consistent with the idea of entropy that the work should lead to unanticipated consequences."[51] The earthwork continues to interact with the wider environment today. Water gathering in depressions reflects sunlight and clouds, snow accentuates the spiral form, the light quality shifts continually, cloud coverage is in perpetual motion, temperatures are always changing, and the shoreline is in flux, creating new experiences for each visitor.

A feeling of isolation was present at construction. Today it is not uncommon to see other visitors when you make the trek to Rozel Point. However, if you spend enough time on the site, you can typically find an opportunity to be alone to experience the type of isolation that Smithson did. Traditionally, a remote

[47] Ember S. Bradbury and David L. Parrott, Jr., "Shoreline Plants of Great Salt Lake," in *Great Salt Lake Biology: A Terminal Lake in a Time of Change*, ed. Bonnie K. Baxter, Jaimi K. Butler (New York: Springer Cham, 2020), 372.
[48] David Parrott, Conversation with author, May 20, 2024.
[49] Hikmet Sidney Loe, "The Double World: A Survey of Spiral Jetty's Stewardship," *Artists of Utah's 15 Bytes*, August 7, 2014, https://artistsofutah.org/15Bytes/index.php/the-double-world-a-survey-of-spiral-jettys-stewardship/.
[50] Robert Smithson, "Oral History Interview with Robert Smithson 1972 July 14-19," Interview by Paul Cummings, Robert Smithson and Nancy Holt papers, Archives of American Art, Smithsonian Institution, 27.
[51] Gary Shapiro, "Spiral Jetty," Holt/Smithson Foundation, 2019, accessed April 16, 2024, https://holtsmithsonfoundation.org/spiral-jetty-0.

location and difficult journey have been hallmarks of Land art in the American West. This association at *Spiral Jetty* was impacted by changes made by state and local governments. Three metal signs were installed in 2004 by FFSL at key junctions to provide directions to the site. In 2010 Box Elder County used $18,000 in funds earmarked for tourism to grind down boulders and fill in ditches with road base on the road to *Spiral Jetty* to make it more accessible to the general public and reduce emergency requests for assistance.[52] Even with these changes, a feeling of adventure and sense of isolation remains once you leave the paved road from GSNHP and head into a remote area with no cell service or facilities. The viewshed from GSNHP to Rozel Point remains virtually unchanged since the days of the railroad.

Finally, *Spiral Jetty's* association with its creator, Robert Smithson, is excellent. Smithson is regarded as one of the most influential post-1945 artists in America and his relevance to the artistic field continues today. *Spiral Jetty* is one of the most documented and well-known artistic works in American art history.[53] The accession of *Spiral Jetty* into Dia Art Foundation's permanent collection in 1999, and subsequent scholarship and stewardship by Dia further solidified *Spiral Jetty's* place within the canon of Land art. Holt/Smithson Foundation, established in 2014 by Nancy Holt, exists to further advance Smithson's legacy. Their involvement, alongside Dia Art Foundation, serves to protect *Spiral Jetty's* association with Robert Smithson. The association is strengthened by both organizations' consistent efforts to support academic scholarship and safeguard intellectual property pertaining to *Spiral Jetty*. While copyright of the earthwork *Spiral Jetty* is shared with Holt/Smithson Foundation and Dia Art Foundation, all other works, including drawings relating to the earthwork *Spiral Jetty*, are solely with the Foundation.[1] In addition, Dia leads active stewardship efforts with institutional partners UMFA, GSLI, Holt/Smithson Foundation and FFSL who all dedicate time and resources towards the preservation of the site and its legacy, meeting regularly to ensure sustained stewardship. The association is strengthened by both organizations' consistent efforts to support academic scholarship regarding *Spiral Jetty* and safeguard the artwork's intellectual property, which is held jointly by Holt/Smithson Foundation and Dia Art Foundation.[54] In addition, Dia leads active stewardship efforts with institutional partners UMFA, GSLI, Holt/Smithson Foundation and FFSL who all dedicate time and resources towards the preservation of the site and its legacy, meeting regularly to ensure sustained stewardship.

[52] Hikmet Sidney Loe, "The Double World: A Survey of Spiral Jetty's Stewardship."
[53] David W. Galenson, "The Reappearing Masterpiece: Ranking American Artists and Art Works of the Late Twentieth Century," *Historical Methods: A Journal of Quantitative and Interdisciplinary History* 38, no. 4 (2005): 178.
[54] Lisa Le Feuvre, Executive Director, Holt/Smithson Foundation, email to author, April 8, 2024.

8. **Statement of Significance**

Applicable National Register Criteria
(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing.)

- ☐ A. Property is associated with events that have made a significant contribution to the broad patterns of our history.
- ☐ B. Property is associated with the lives of persons significant in our past.
- ■ C. Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- ☐ D. Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations
(Mark “x” in all the boxes that apply.)

- ☐ A. Owned by a religious institution or used for religious purposes
- ☐ B. Removed from its original location
- ☐ C. A birthplace or grave
- ☐ D. A cemetery
- ☐ E. A reconstructed building, object, or structure
- ☐ F. A commemorative property
- ☐ G. Less than 50 years old or achieving significance within the past 50 years

Areas of Significance
(Enter categories from instructions.)
ART
LANDSCAPE ARCHITECTURE

Period of Significance
1970

Significant Dates
1970

Significant Person
(Complete only if Criterion B is marked above.)

Cultural Affiliation

Architect/Builder

Smithson, Robert (Artist)
Phillips, Robert (Builder)

Statement of Significance Summary Paragraph (Provide a summary paragraph that includes level of significance, applicable criteria, justification for the period of significance, and any applicable criteria considerations.)

Robert Smithson's *Spiral Jetty* at the Great Salt Lake is an internationally celebrated work of Land art. The site is of national significance under Criterion C in Area of Art as the work of a master. Smithson is considered one of the most influential postwar artists in America.[55] According to scholar Dr. Johanna Drucker, "The work of Robert Smithson occupies a crucial historical and conceptual position in twentieth-century art. Participating in the shift from modernist autonomy to Minimalist theatricality. Smithson's sculpture emphasizes the historical break with the aesthetic field of modernity."[56] *Spiral Jetty* is also nationally significant under Criterion C in Area of Landscape Architecture. Through his large-scale earthworks like *Spiral Jetty*, Smithson reframed how landscape architects considered the built environment, directly influencing the field of landscape architecture. Finally, *Spiral Jetty* is also significant under Criterion C in the Area of Art as an influential example of Land art, a modern genre of art which emerged from the unique political and social environment of 1960s America. Instantly celebrated by the art world when constructed, today *Spiral Jetty* is widely recognized as the best known work of Robert Smithson. Smithson researched the region around the Great Salt Lake and arranged to lease the lakebed at Rozel Point in March of 1970. He returned to design and construct *Spiral Jetty* over the course of approximately two weeks in April 1970. The period of significance for *Spiral Jetty* is 1970, the year it was conceived and constructed. Public appreciation for Spiral Jetty continues to grow. In 2017 the Utah legislature voted to formally recognize *Spiral Jetty* as an official symbol of the state by designating it as "the state work of land art."[57]

Narrative Statement of Significance (Provide at least **one** paragraph for each area of significance.)

Criterion C Significance: Work of a Master

Spiral Jetty is significant under Criterion C as the work of a master. Robert Smithson [Figure 3] was one of the most important American artists of the twentieth century. He created a diverse range of works including earthworks, sculpture, paintings, films, drawings, photographs, and collages. In addition to Dia Art Foundation, Smithson's pieces are held by leading museums around the world including the National Gallery of Art, Art Institute of Chicago, The Museum of Modern Art, NY, Solomon R. Guggenheim Museum, Whitney Museum of American Art, National Gallery of Australia, and National Museum of Modern Art in Tokyo. Museums in the United States and abroad have curated over 50 exhibits showcasing Smithson's works. Art historians, scholars, students and critics have written thousands of scholarly articles, thesis and books on Smithson, his essays and his artworks. During his short life Smithson helped lay the foundation for late-twentieth-century art. He pushed the boundaries of art into what art critic Rosalind Krauss called "an expanded field."[58] In 2004 the Los Angeles Museum of Contemporary Art produced a major retrospective spanning Smithson's entire artistic career. In addition

[55] Cornelia Butler, "A Lurid Presence: Smithson's Legacy and Post-Studio Art," in *Robert Smithson*, ed. Eugenie Tsai, Cornelia Butler (Berkeley: University of California Press in association with Museum of Contemporary Art, Los Angeles, 2004), 225.
[56] Johanna Drucker introduction to Eugenie Tsai, *Robert Smithson Unearthed: Drawings, Collages, Writings*, (New York: Columbia University Press, 1991), xiii.
[57] Utah State Legislature HB 211, "State Work of Art," https://le.utah.gov/~2017/bills/static/HB0211.html.
[58] Rosalind Krauss, "Sculpture in the Expanded Field," *October* 8 (1979): 31–44. https://doi.org/10.2307/778224.

to Los Angeles, the exhibit traveled to Dallas, Texas and New York City, New York. Museum Director Jeremy Strick wrote: "Smithson's work appears prophetic, as if laying out a set of aesthetic and conceptual propositions that would set the agenda for artistic practice during the following decades."[59]

Smithson was born in Passaic, New Jersey, to Irving Smithson and Susan Duke on January 2, 1938. He married artist Nancy Holt in 1963. He died on July 20, 1973 at the age of 35 in an airplane accident in West Texas while surveying his third and final earthwork, *Amarillo Ramp*. As a child Smithson developed a life-long interest in geology, cartography, crystallography, natural history and travel fueled by the industrial and picturesque New Jersey landscape and by family cross-country road trips to National Parks including the Grand Canyon, Yosemite and the Badlands.[60] During high school Smithson won a scholarship to study at the Art Students League in New York City where he augmented his high school education by taking art classes. In New York City Smithson gained access to an atmosphere of intellectual and artistic stimulation that he could not find in his home city. When Smithson moved to New York City in 1957,[61] New York had surpassed Europe as the epicenter of art.[62]

Receiving no formal education past high school, Smithson was an autodidact who gained "a vast reservoir of knowledge through his travels and extensive reading."[63] Addressing topics ranging through art history, phenomenology, anthropology, philosophy, belief systems, crystallography, natural science and psychoanalysis[64] to inform his work. In the early 1960s Smithson went through an artistic transformation shifting his "arts medium, appearance and mood."[65]

Smithson started developing his ideas for earthworks around 1965-66, working as an artist-consultant on a proposal integrating art into the Dallas-Fort Worth airfield project for the engineering firm Tippetts, Abbett, McCarthy, Stratton.[66] While the firm did not secure the commission, the concepts Smithson explored, including large scale sculptures, aerial art, mapping and remote projection directly influenced the direction of his art and concepts behind *Spiral Jetty*.[67] Smithson described this as being the time when his inklings of earthworks began. At this time, he coined the term "Nonsite" to describe the artworks that brought materials from specific locations into the museum, constructing a tangible relationship between the museum and the post-industrial landscape. Typically, these Nonsite sculptures included photographs or an annotated map that referred to the spatial location of the "Site." This concept was an important contribution to the nascent artistic fields of Conceptual and Land art. In *Spiral Jetty,* Nonsite aspects are

[59] Jeremy Strick, "Director's Foreword," in *Robert Smithson*, ed. Eugenie Tsai, Cornelia Butler (Berkeley: University of California Press in association with Museum of Contemporary Art, Los Angeles, 2004, 2004), 7.
[60] Eugenie Tsai, "Robert Smithson: Plotting a Line from Passaic, New Jersey, to Amarillo, Texas," in *Robert Smithson*, ed. Eugenie Tsai, Cornelia Butler (Berkeley: University of California Press in association with Museum of Contemporary Art, Los Angeles, 2004), 11.
[61] Paul Serge, "Robert Smithson: Birth of an Artist," LINEA, December 20, 2021, accessed March 24, 2024, https://asllinea.org/robert-smithson-art-students-league/.
[62] João Florêncio, "Abstract Expressionism: How New York Overtook Europe to Become the Epicentre of Western Art," *The Conversation*, September 23, 2016, https://theconversation.com/abstract-expressionism-how-new-york-overtook-europe-to-become-the-epicentre-of-western-art-65820.
[63] Tsai, "Robert Smithson: Plotting a Line from Passaic, New Jersey, to Amarillo, Texas," 13.
[64] Timothy D. Martin, "Robert Smithson and the Anglo-American Picturesque," in *Anglo-American Exchange in Postwar Sculpture, 1945–1975*, ed. Rebecca Peabody (Los Angeles: Getty Publications, 2011), 166.
[65] Suzaan Boettger, *Inside the Spiral: The Passions of Robert Smithson*, 159.
[66] Ibid.*,* 71.
[67] Leigh A. Arnold, "Texas as Nonsite: Robert Smithson's Unfinished Works in the Lone Star State," in *Robert Smithson in Texas*, ed. Elyse Goldberg (New York/Shanghai: Holt-Smithson Foundation, James Cohan Gallery, 2015), 33.

fully explored through Smithson's *Spiral Jetty* film, and essay "The Spiral Jetty," published in *Arts of the Environment*[68] in 1972. Smithson scholar Gary Shapiro stresses the relationship between the sculpture, film and essay, noting, "...there is no primary, authentic object (the spiral) to which the film and the essay are merely ancillary."[69] Rather, he argues the three are intertwined works all titled "*Spiral Jetty*."

Smithson favored sites with complex histories. His works invited viewers to consider their relationship to nature by not hiding scars on the landscape, but rather by foregrounding them to invite contemplation and response through physical immersion in the site. Lawrence Alloway wrote, "The point is that the landscape and its systems of ordering have been familiar to Smithson most of his life and their presence can be felt on every level of his art and thinking."[70]

Major Earthworks

In April 1970 just months after realizing *Partially Buried Woodshed* at Kent State, Smithson completed his first major earthwork, *Spiral Jetty* [Figures 1,20,21], on the shore of the Great Salt Lake (explored fully in the next section). He went on to complete two additional large-scale earthworks, *Broken Circle/Spiral Hill* (1971) [Figure 31] and *Amarillo Ramp* (1973) [Figure 32]. The three works "are large-scale site-specific constructions built with indigenous materials." They "employ a similar curved form" and were all "constructed in dialogue with a body of water."[71] Of these, *Spiral Jetty* is the most well-known and frequently visited. Due to Smithson's untimely death in 1973 before fully documenting *Broken Circle/Spiral Hill* or constructing *Amarillo Ramp*, *Spiral Jetty* is the only one of the three earthworks with full Nonsite documentation. The professional photographs, essay and film in addition to publicity in art magazines and newspapers all served to broaden public awareness and keep *Spiral Jetty* in the collective consciousness as Smithson intended.

Smithson created *Broken Circle/Spiral Hill* for Sonsbeek '71, an outdoor sculpture exhibit in Arnhem, The Netherlands. At the edge of a lake in a privately owned sand quarry in Emmen, Smithson created a pair of sculptures, *Broken Circle/Spiral Hill*. "With bulldozers, Smithson built a large conical hill on the edge of the quarry lake and grooved a spiral path to its top. Below, a circular island of white and ochre sand with a curved canal along one half, extended into the lake…By chance, a huge glacial rock was already on the site in the very center of Smithson's man-made island. Across the lake, iron oxide cliffs reflected their orange color into the still, green water."[72] Describing his work to Gregoire Müller in a 1971 interview, Smithson noted: "With my work in the quarry, I somehow reorganized a disrupted situation and brought it back into another kind of shape."[73] Smithson gifted the work to the people of the Netherlands but it is not regularly accessible by the public since it resides on private property. Smithson considered it a "major work" but it has not received the level of visitorship or critical analysis afforded to *Spiral Jetty*.[74]

[68] Robert Smithson, "The Spiral Jetty," *Arts of the Environment,* edited by Gyorgy Kepes, 1972.
[69] Gary Shapiro, *Earthwards: Robert Smithson and Art After Babel*, (Berkeley: University of California Press, 1995), 7.
[70] Lawrence Alloway, "Robert Smithson's Development," *Artforum* 11 no. 4 (November 1972), 60.
[71] Amy Von Lintel, Jonathan Revett, "Completing Smithson's Trilogy," in *Robert Smithson in Texas*, ed. Elyse Goldberg (New York/Shanghai: Holt-Smithson Foundation, James Cohan Gallery, 2015), 16.
[72] Kasha Linville, "Sonsbeek: Speculations, Impressions," *Artforum* 10, no. 2, (October 1971), 56.
[73]Robert Smithson, "...The Earth, Subject to Cataclysms, Is a Cruel Master," Interview with Grégoire Müller (1971), in *Robert Smithson, The Collected Writings* ed Jack Flam, 253, (Berkeley: University of California Press, 1996).
[74] Anja Novak, "Broken Circle and Spiral Hill: Having Entropy the Dutch Way," Holt/Smithson Foundation, February 2021, https://dare.uva.nl/search?identifier=ceaab535-3839-41b3-904d-6ebcd644331b.

Smithson's final earthwork, *Amarillo Ramp*, was constructed on a private ranch owned by art benefactor Stanley March 3 in West Texas in the summer of 1973. *Amarillo Ramp* is a 140-foot-diameter arc composed of local rock and dirt on the edge of Tecovas Lake, a manmade irrigation lake. The 15-foot-wide ramp rises from zero to fifteen feet in elevation. Before boarding a small airplane to photograph and survey his staked design, Smithson had completed final sketches. While surveying the work from the air, the airplane crashed and Smithson as well as the pilot, Gale Ray Rogers, and photographer, Richard E. Curtin, perished on impact.[75] Shortly after his death Nancy Holt, Richard Serra and Tony Shafrazi returned to Amarillo to finish construction of *Amarillo Ramp* according to Smithson's drawings, staked design, and vision.[76] Constructed just over 50 years ago, *Amarillo Ramp* has been impacted by erosion. The irrigation lake is empty, and vegetation is growing on and around the earthwork. No active management plan is in place. Visitation is possible but must be arranged ahead of time and is subject to volunteer guide availability.[77]

Criterion C Significance: Landscape Architecture

Smithson's major earthworks, most notably the *Spiral Jetty*, impacted the field of landscape architecture in critical ways making it significant under Criterion C in the area of Landscape Architecture. In the early 1970s ecological processes espoused by Ian McHarg in *Design with Nature* (1969)[78] and large-scale planning dominated the field of landscape architecture. Artists like Smithson expanded perspectives and reframed the field, setting a new direction for landscape architecture.[79] Landscape historian John Dixon Hunt writes:

> What has privileged Land Art in the essentially barren conceptual field of landscape architecture is its sense of creative purpose - the confidence of its practitioners and critics alike that has a firm basis in ideas. Ideas of how to respond to land, ideas of art and design, together with no fear of conjoining them. In short, Land Art seems to restore to landscape architecture its old and largely lost concern for the intricate melding of site, sight and insight. I see fundamental and welcome development in this respect from, say, such classic Land Artwork as Robert Smithson's *Spiral Jetty* of 1970 which seems to draw attention more to its own gesture than any *mise en valeur* of the surrounding territory…[80]

In an era when landscape architecture as a whole had diverged from original guiding principles, Land art reminded landscape architects of their historic role. Elizabeth K. Meyers confirms Land art's importance to landscape architects seeking to reclaim its origins:

[75]"Robert Smithson, 35, A Sculptor, Is Dead," *The New York Times*, July 24, 1973, https://www.nytimes.com/1973/07/24/archives/robert-smithson-35-a-sculptor-is-dead.html.
[76]John Coplans, "Robert Smithson, The 'Amarillo Ramp.'" *Artforum* 12, no. 8 (April 1974): 41.
[77] Jonathan Revett, Associate Professor of Art, Texas A&M University, email message to author, March 8, 2024.
[78] Karen M'Closkey, *Unearthed: The Landscapes of Hargreaves Associates* (Philadelphia: University of Pennsylvania Press, 2013), 1.
[79] Michael Spens, "Site/Non-Site: Extending the Parameters in Contemporary Landscape," *Architectural Design* 77, no. 2 (March 2007): 6–11.
[80] John Dixon Hunt, "Foreword" in Udo Weilacher, *Between Landscape Architecture and Land Art*, (Berlin: Birkhauser, 1999), 6.

> To some it may seem odd that landscape architects looked toward art and design theory and practice when seeking direction about folding ecological principles and environmental values into their creative processes. But this simultaneous look to art as well as science and to theories of site specificity and phenomenology as well as ecology was critical to the successful integration of environmentalism into landscape architectural design.[81]

Elizabeth K. Meyer identifies several landscape architects leading the effort to bridge science and art.[82] Of those, George Hargreaves and Michael Van Valkenburgh specifically credit Smithson for influencing their work through his artwork and writings. George Hargreaves recalls:

> *Spiral Jetty*, *Amarillo Ramp*, and *Spiral Hill Broken Circle* [sic] are now well-known earthworks by Robert Smithson. This was not always the case, and in 1978, while I was attending graduate school in landscape architecture, these three projects were beacons on the parched field of designed landscapes. Formally, the organization of these projects was very different from the moderns, eschewing asymmetrical balancing or relational objectives between parts (structuralism). There seemed to be a different strategy employed here, one of "open ended" organization where other elements such as water, wind, and gravity could enter and influence the landscape. This in turn, gave rise to an idea of expressing the processes of nature through open-ended vehicles of culture. For the first time I understood that designed landscapes could be extraordinarily meaningful. The Smithson works reintroduced the concept of landscape as idea - something lost in pursuit of the functional landscape - and opened a door to a world not yet fully explored and still expanding.[83]

In response to Smithson's influence, George Hargreaves and his associates (most notably Mary Margaret Jones), impacted the direction of landscape architecture at a critical time. Professor Karen M'Closkey writes: "Hargreaves Associates' early work, among that of several other practices at this time, marks an important moment in landscape architecture: one that bridged the divide that had dominated the discipline in the 1960s and 1970s, when the emphasis on large-scale planning led to a disregard for the qualitative and experiential aspects of landscape's material and form."[84]

Crissy Field in San Francisco's Presidio was designed by Hargreaves Jones in 2001. Karen M'Closkey's description evokes Smithson's influence: "Hargreaves Associates' redesign of Crissy Field simultaneously brings together two very different notions of a shifting landscape: one that marks particular moments of human-induced site change over time, and another that allows natural processes to enact material change on the site."[85] Crissy Field receives over one million visitors a year. It is "a city-defining landscape amenity" which has been used "...as a precedent in countless publications, lectures, and in academic studios and courses around the world."[86]

[81] Elizabeth K. Meyer, "Post-Earth Day Conundrum. Translating Environmental Values into Landscape Design" in *Environmentalism in Landscape Architecture*, ed Michel Conan, (Washington, DC: Dumbarton Oaks, 2000), 191.
[82] Elizabeth K. Meyer mentions landscape architects Susan Child, George Hargreaves, Catherine Howett, Anne Whiston Spirn, and Michael Van Valkenburgh in Elizabeth K. Meyer, "Post-Earth Day Conundrum. Translating Environmental Values into Landscape Design," 189.
[83] George Hargreaves, "Most Influential Landscapes," *Landscape Journal* 12, issue 2, (Fall 1993): 177.
[84] M'Closkey, *Unearthed*, 3.
[85] Ibid., 45.
[86] "Crissy Field: An Enduring Landmark Transformation," American Society of Landscape Architects, accessed January 3, 2023, https://www.asla.org/2022awards/5990.html.

Another area of landscape architecture influenced by Smithson was land reclamation. He wrote, "Across the country there are many mining areas, disused quarries and polluted lakes and rivers. One practical solution for the utilization of such devastated places would be land and water re-cycling [sic] in terms of Earth Art."[87] He was one of the first artists to advance active collaboration between artists and industry.[88] He contacted many mining companies and created a number of proposals for mining site reclamation projects, but none were completed due to his untimely death. However, his vision and proposals to reclaim degraded sites through artistic collaboration inspired the organization of the symposium, *Earthworks: Land Reclamation as Sculpture,* held in Seattle, Washington in 1979.[89] As part of the symposium, artists were invited to submit proposals for reclamation of a former gravel pit as public space. Robert Morris, a contemporary of Robert Smithson, was selected by the committee. He created *Untitled Earthwork: (Johnson Pit #30).* The earthwork was listed in the National Register of Historic Places on August 16, 2021.[90]

Criterion C Significance: Art

Spiral Jetty is significant under Criterion C in the area of Art as an influential work of the Land art genre. A 2005 survey of modern art scholarly publications and textbooks by Professor David Galenson revealed *Spiral Jetty* is "not only the dominant American work of art of the late twentieth century but also the most important individual work produced by an American artist during the past 150 years."[91] Of all Smithson's large earthworks, it is the most well-documented and accessible. In addition, *Spiral Jetty* brings together concepts explored in Smithson's earlier works. In an interview for the Archives of American Art, Smithsonian Institution, in 1972, Smithson discussed the significance of *Spiral Jetty* in relation to his body of work, "...I feel very close to it myself. It's sort of, in a way, I guess, something that all the other work was pointing toward..."[92]

Land Art

The social and cultural upheaval of the 1960s pushed against established norms in many areas including gender equality, civil rights, human sexuality, consumerism, environmental policies, and respect for governmental institutions. Over the span of a decade activism led to the passage of significant legislation including the Civil Rights Acts of 1964 and 1968, the Voting Rights Act of 1965, which codified rights for women, the formation of the Environmental Protection Agency and passage of the National Environmental Policy Act in 1970.

The art world also experienced significant change during the decade with artists directly challenging the commodification of art by pushing it outside gallery walls and into the landscape. Contemporary scholars

[87] Robert Smithson, "Untitled 1971" in *Robert Smithson: The Collected Writings*, ed. Jack Flam (Berkeley: University of California Press), 376.
[88] Robert Morris would complete the first artistic and industrial collaboration at a mining site in 1979 at the Earthworks Symposium with *Untitled Earthwork (Johnson Pit #30).*
[89] Udo Weilacher, *Between Landscape Architecture and Land Art*, 29.
[90] "Untitled Earthwork: (Johnson Pit #30)," NRIS #100006801. National Register (SeaTac, King County, Washington: National Register of Historic Places, 2021).
[91] David W. Galenson, "The Reappearing Masterpiece: Ranking American Artists and Art Works of the Late Twentieth Century," *Historical Methods: A Journal of Quantitative and Interdisciplinary History* 38, no. 4 (2005): 178. https://doi.org/10.3200/HMTS.38.4.
[92]Smithson, "Interview with Robert Smithson for the Archives of American Art, Smithsonian Institution (1972)," Interview by Paul Cummings, 38.

refer to the genre as "Land art" while "Earth art" and "Earthworks" are considered "subsets."[93] Early Land art was not necessarily an environmental movement but rather "site-specific sculptural projects that utilized the materials of the environment to create new forms or to adjust our impressions of the panorama."[94] The early artists "...created works that were most apparently concerned with such matters as the effects of light, weather, and the seasons on our perception of a work of art; its altered physical character owing to the vicissitudes of nature; the essentially horizontal character of the earth and what the demanded of a work in the landscape; and the perception of the scale of artwork in the boundless space of the outdoors."[95] With Land art, sculpture shifted from "the vertical to the horizontal."[96] The artists working in the genre sought "to win back nature as space which allows sensory perception, space in which a relationship between man and the environment becomes at all possible again."[97]

In October 1968 Smithson curated *Earthworks*, one of the first Land art exhibits, with the support of Virginia Dwan at the Dwan Gallery in New York City. In addition to Smithson, artists and landscape designer the National Gallery of Art s included were Carl Andre, Herbert Bayer, Walter De Maria, Michael Heizer, Stephen Kaltenbach, Sol LeWitt, Robert Morris, Claes Oldenburg, and Dennis Oppenheim.[98] Smithson's artistic production and critical essays were instrumental to the movement.

In the fifty plus years since the *Earthworks* exhibition, artistic approaches to Land art have evolved. Lisa Le Feuvre, Executive Director of Holt/Smithson Foundation explains, "The understanding of Land art is constantly developing and contemporary research underlines thinking through this art historical term with cognizance of the wider context including but not limited to Indigenous Land Rights, internationalism, and ecological concerns."[99] Expanding on artistic approach to reflect ecological concerns, art critic and essayist Megan O'Grady writes, "Increasingly, environmental art is less about placing anything on the Earth at all, but instead about problematizing our relationship with it."[100] *Spiral Jetty* is uniquely positioned to contribute to the ongoing and timely conversation regarding human impact on sensitive ecosystems.

Site Selection

For Land artists like Smithson, the site context was considered part of the earthwork.[101] The journey through a low-populated area was an important part of the experience. Smithson had been looking for a site to construct a large-scale earthwork, not as a gesture that might quickly disappear, but as a physical mass where he could infuse meaning into the landscape.[102] He developed an interest in saline lakes after

[93] Philipp Kaiser and Miwon Kwon, *Ends of the Earth: Land Art to 1974*, (Los Angeles: Museum of Contemporary Art, 2012) 17.
[94] Jeffrey Kastner and Brian Wallis, eds., *Land and Environmental Art*, (London: Phaidon Press, 1998), 12.
[95] John Beardsley, "Traditional Aspects of New Land Art," *Art Journal* 42, no. 3 (October 1, 1982): 226.
[96] Suzan Boettger, *Earthworks*. Berkeley: University of California Press, 2002, 34.
[97] Manfred Smuda, *Landschaft* (Frankfurt: Suhrkamp, 1986), quoted in Udo Weilacher, *Between Landscape Architecture and Land Art,* (Basel, Switzerland: Birkhäuser, 1999), 9.
[98] Boettger, 2002, 24.
[99] Lisa Le Feuvre, Executive Director, Holt/Smithson Foundation, email to author, June 3, 2024.
[100] Megan O'Grady, "What's the Role of Land Art in an Era of Environmental Devastation?" Art Basel, https://www.artbasel.com/stories/colorado-land-art-marguerite-humeau.
[101] John Beardsley, *Earthworks and Beyond: Contemporary Art in the Landscape* (New York: Abbeville Press, 1989), 7.
[102] Smithson, "Interview with Robert Smithson for the Archives of American Art, Smithsonian Institution (1972)," Interview by Paul Cummings, 25.

working at Mono Lake in California. Smithson read about Bolivia's dramatic and colorful saline lake environments in geologist William E. Rudolph's *Vanishing Trails of Atacama* (1963)[103] and wanted a similar environment for his earthwork. Smithson focused on saline lakes in the United States and learned of the "tomato red" color of the Great Salt Lake's north arm from Ted Tuttle at the Utah Park Development office.[104]

In March 1970 Smithson and Holt visited Utah to scout possible earthwork sites on the Great Salt Lake. Smithson writes about selecting the site in his 1972 essay "The Spiral Jetty."

> About one mile north of the seeps I selected my site. Irregular beds of limestone dip gently eastward, massive deposits of black basalt are broken over the peninsula, giving the region a shattered appearance. It is one of the few places on the lake where the water comes right up to the mainland. Under shallow pinkish water is a network of mud cracks supporting the jigsaw puzzle that composes the salt flats….[105]

Smithson was interested in "sites that had been in some way disrupted or pulverized" and systems that showed interplay between man and nature.[106] He referred to the *Spiral Jetty* at Rozel Point, as a "dead sea,"[107] that held the remains of decades of abandoned oil exploration attempts. He viewed the site as a land reclamation project.[108] The random dilapidated structures and rusted equipment present at Rozel Point gave Smithson "great pleasure." He observed, "This site gave evidence of a succession of man-made systems mired in abandoned hopes."[109] He studied maps and geological reports of the Great Salt Lake and Rozel Point that included detailed information on oil mining activities.[110] In addition, the site was in close proximity to the GSNHP where a once monumental engineering feat was reduced to a small section of track to commemorate the event with reenactments. The Rozel Point area holds layers of geologic and cultural time revealing man's impact on the environment.

Other important landscape features Smithson noted in his essay included the connection of the lake to the mainland, black basalt rocks, white salt crystals and pinkish water covering the salt flats.[111] Smithson's previous work with mirrors, both in the gallery and in the landscape, likely influenced site selection as well.[112] A film sketch reveals the sun's reflection positioned in the center of *Spiral Jetty* [Figure 12]. Finally, the Great Salt Lake's remote location and topography gave a feeling of prehistory that interested Smithson. The reddish color of the lake was "analogous to blood" and "an image of primordial

[103] Smithson, "The Spiral Jetty," 143.
[104] Ibid., 143,145.
[105] Smithson, "The Spiral Jetty," 146.
[106] Robert Smithson in Lawrence Alloway, "Robert Smithson's Development," *Artforum* no. 3 (1972): 54.
[107] It is likely Smithson was aware of Great Salt Lake's nickname, "America's Dead Sea." The reference was widely-known and noted in multiple newspapers including a 1877 Salt Lake Herald-Republican article reprinting John Muir's letter detailing his bath in the Great Salt Lake titled "America's Dead Sea Poetically Pictured by a Naturalist," spapers.lib.utah.edu/ark:/87278/s60p2598/11693486.
[108] Robert Smithson, "Frederick Law Olmsted and the Dialectical Landscape," in Robert Smithson, The Collected Writings, ed. Jack D. Flam (Berkeley: University of California Press, 1996), 165.
[109] Smithson, "The Spiral Jetty," 146.
[110] Robert Smithson and Nancy Holt Papers, Box 5, Folder 46. Archives of American Art, Smithsonian Institution, Washington, DC.
[111] Smithson, "The Spiral Jetty," 146.
[112] Loe, *The Spiral Jetty Encyclo: Exploring Robert Smithson's Earthwork through Time and Place,* 172, 174

beginnings."[113] He begins his essay, "The Spiral Jetty," with a quote from the science fiction author G.K. Chesterton about the color red, signifying just how essential it was to his selection of the Great Salt Lake.

Design

The prehistoric and post-industrial setting at Rozel Point allowed Smithson to explore concepts which had long interested him including entropy, time, and scale. On the mud flats he sought to create a reef to "stabilize something that is unstable."[114] The earthwork was designed to change, not in form, but in response to natural processes of time and nature expressing "opposing forces of creation and destruction."[115] Smithson claimed, "The water is red, like an entropic landscape. Sometimes it looks like wine. Crystals will grow on the fringes. It is built on a reef under three feet of water, and it dries up in late summer, so there is a constant shift in physical properties. I'm working here, not with paint, but with the color of the water, the crystals, the black rock."[116]

From the beginning, scale was an essential component of the work. It was designed to be experienced from the air, the hillside overlooking the *Spiral Jetty*, and from the earthwork itself.[117] Rejecting the idea of art as a fixed object, by placing *Spiral Jetty* in a landscape layered in geologic time and human history, Smithson created a landscape with "...generative power of both visual and auditory scale."[118] Smithson describes his design intent in a 1970 letter to Charles R. Hansen, director of the Division of State Lands at the DNR:

> This project will resemble a jetty in the shape of a spiral. The structure will be made of rock and gravel. The purpose of placing the rock on the mud flat area will be to induce salt crystals on the rock and gravel as incrustations that will develop over a period of time. These will contrast with the red color of the water. Its purpose is purely esthetic [sic] and it can be viewed from [an] airplane or from the road.[119]

The *Spiral Jetty* design emerged over time as Smithson interacted with the site. Before visiting Rozel Point, Smithson considered making an island, a concept he had previously explored in drawings and in sculptures, describing "I thought of making an island with the help of boats and barges, but in the end I would let the site determine what I would build."[120] Smithson describes his impression upon arriving at Rozel Point, "This site was a rotary that enclosed itself in an immense roundness. From that gyrating space emerged the possibility of the Spiral Jetty."[121] In his 1970 interview with Paul Toner, Smithson spoke of his design intent, "Now I am doing a piece in the Salt Lake that is a spiral. The piece, like the others, tends to be enclosed, with a sense of containment…My intention is to arrest a moment in the peripheral circumference area, and relate it to a central point."[122]

[113] Robert Hobbs, *Robert Smithson: Sculpture,* (Ithaca: Cornell University Press, 1981), 193.
[114] Ibid., 239.
[115]Beardsley, "Traditional Aspects of New Land Art," 226.
[116] Smithson and Toner "*Interview with Robert Smithson*," 239-240.
[117] Loe, *The Spiral Jetty Encyclo: Exploring Robert Smithson's Earthwork through Time and Place,* 242.
[118] Smithson, "The Spiral Jetty," 147.
[119] Robert Smithson in Loe, *The Spiral Jetty Encyclo: Exploring Robert Smithson's Earthwork through Time and Place*, 64.
[120] Smithson, "The Spiral Jetty," 145.
[121] Ibid.
[122] Smithson and Toner, "Interview with Robert Smithson," 236.

Smithson's interest in crystallography provided design inspiration beginning in the mid-1960s.[123] Around this time advances in technology made it possible for electron microscopes to photograph crystal formations. A book in Smithson's library, Charles Bunn's *Crystals: Their Role in Nature and in Science* (1964),[124] includes an image of a spiral layer formation caused by a single screw dislocation [Figure 4]. The formation inspired Smithson's design in that period – and ultimately the design of *Spiral Jetty.*[125] Smithson's 1966-1967 work as an artist consultant for the Dallas-Fort Worth Regional Airport led him to experiment with scale and spiral forms. *Proposal for Dallas-Fort Worth Regional Airport: Aerial Map* (1967) for example, includes a clockwise spiral of blue rocks [Figure 5], while *Project For Clear Zone* (1967) introduces the concept of alternating earth and water with a four-foot-deep channel of water in square spiral form [Figure 6].[126] Finally, Smithson's *Aerial Map-Proposal for Dallas Fort-Worth Regional Airport* (1967) is a spiral composed of offset mirrors on the ground plane [Figure 7]. This work led to his three-dimensional *Gyrostasis* (1968), which Smithson saw as a precursor to *Spiral Jetty* [Figure 8].[127]

In his essay, "The Spiral Jetty," Smithson ties the molecular structure of salt crystals to his design inspiration:

> And each cubic salt crystal echoes the Spiral Jetty in terms of the crystal's molecular lattice. Growth in a crystal advances around a dislocation point, in the manner of a screw. The Spiral Jetty could be considered one layer within the spiraling crystal lattice, magnified trillions of times.[128]

While crystal formations undoubtedly influenced the *Spiral Jetty* design, Suzaan Boettger reminds, "Smithson appreciated symbols and employed them."[129] Smithson first used the spiral in his early drawings and paintings such as *Eye of Blood* (1960).[130] His travels to ancient sites in Ohio and throughout the western United States exposed him to symbols in ancient earth mounds and rock art. The Serpent Mound in Adams County, Ohio is an ancient effigy mound shaped like a snake whose "tail" curves around into a spiral. The earthwork is 1,348-feet-long and three-feet-high. Smithson refers to the Ohio mounds in his 1973 *Artforum* essay *Frederick Law Olmsted and the Dialectical Landscape*. Interestingly, Smithson's *Spiral Jetty* was constructed to be approximately three feet tall [Figure 10] and a preconstruction drawing puts the length at 1,380 feet.[131] Smithson often referred to the point where *Spiral Jetty* extends from the shore as the "tail."[132]

[123] Thomas Crow, "Cosmic Exile: Prophetic Turns in the Life and Art of Robert Smithson," in *Robert Smithson*, ed. Eugenie Tsai, Cornelia Butler (Berkeley: University of California Press in association with Museum of Contemporary Art, Los Angeles, 2004), 52-53.
[124] Jennifer L. Roberts, "The Taste of Time: Salt and Spiral Jetty" in *Robert Smithson*, ed. Eugenie Tsai, Cornelia Butler (Berkeley: University of California Press in association with Museum of Contemporary Art, Los Angeles, 2004), 98.
[125] Jennifer L. Roberts *Mirror-Travels: Robert Smithson and History*, (New Haven: Yale University Press, 2004), 18.
[126] Hobbs, *Robert Smithson: Sculpture*, 76, 96.
[127] Ibid., 96.
[128] Smithson, "The Spiral Jetty," 147.
[129] Boettger, *Inside the Spiral: The Passions of Robert Smithson*, x.
[130] Hobbs, *Robert Smithson: Sculpture*, 195.
[131] Cooke and Kelly, *Robert Smithson Spiral Jetty*, 186.
[132] Robert Smithson, "The Spiral Jetty," 146.

Another ancient source of inspiration may have been rock art. A common rock art symbol found across North America and throughout Utah is the spiral. The generalized distribution of the spiral suggests a "high degree of group interaction" among the archaic people.[133] For some cultures like the Hopi, the spiral tells of a journey, for others it is believed to be their origin story[134] or part of a ritual at important hunting locations.[135] Around the Great Salt Lake spirals have been found near Tooele, Stansbury Island and Corinne. Smithson mentions the spiral rock art found in Corinne, a small city he passed en route to the *Spiral Jetty* site in his film.

Entropy was a major theme incorporated by Smithson into many works and writings. He defined entropy in a 1973 interview with Alison Sky titled "Entropy Made Visible." Smithson states, "....it's a condition that's irreversible, it's a condition that's moving towards a gradual equilibrium and it's suggested in many ways." He elaborates regarding closed systems, directly applicable to the Great Salt Lake, "You have a closed system which eventually deteriorates and starts to break apart and there's no way that you can really put it back together again."[136] Just months before realizing *Spiral Jetty*, Smithson engaged entropy as an artistic medium in his *Partially Buried Woodshed* at Kent State. Smithson poured dirt on the roof of an old woodshed until the weight collapsed the center beam. Smithson gifted the work to the institution with the stipulation that it not be altered in any way and be allowed to deteriorate. He explained, "The entire work of art is subject to weathering and should be considered part of the work."[137]

The Kent State project was just one example of Smithson's view of entropy as a medium to create an artwork in perpetual flux and he asserted, "I'm interested in collaborating with entropy."[138] With *Spiral Jetty* Smithson created a physical mass in a closed system that entropy could work upon and be reflected against. Speaking of *Broken Circle/Spiral-Hill,* another large-scale earthwork, he described this thinking which can be applied to *Spiral Jetty*:

When you are dealing with a great mass, you want something that will, in a sense, interact with the climate and its changes. The main objective is to make something massive and physical enough so that it can interact with those things and go through all kinds of modifications. If the work has sufficient physicality, any kind of natural change would tend to enhance the work.[139]

In addition to entropy acting as a force on the *Spiral Jetty*, several prominent scholars think entropy is embedded at the *Spiral Jetty* site through the symbolism of the counterclockwise spiral. Robert Hobbs observed "the counterclockwise whirl of the Jetty itself connoting entropy and destruction."[140] According to John Coplans the *Spiral Jetty* earthwork confirmed "...the spiral is related to his [Smithson's] notions of entropy and irreversibility."[141]

[133] Kenneth B. Castleton and David B. Madsen, "The Distribution of Rock Art Elements and Styles in Utah," *Journal of California and Great Basin Anthropology* 3, no. 2 (December 1, 1981), 167-170, 172. https://escholarship.org/uc/item/8q90398r.f
[134] Elizabeth Hora, Utah State Historic Preservation Office, Interview with author, February 20, 2024.
[135] Castelton and Madsen, "The Distribution of Rock Art Elements and Styles in Utah," 168.
[136] Alison Sky and Robert Smithson, "Entropy Made Visible," *On Site* 4, (Fall 1973): 26-30.
[137] Robert Smithson, Letter to Kent State University, January 22, 1970. Robert Smithson and Nancy Holt papers, Archives of American Art, Smithsonian Institution.
[138] Smithson, "'...The Earth, Subject to Cataclysms, Is a Cruel Master.' Interview with Grégoire Müller (1971)," 256.
[139] Ibid.
[140] Hobbs, *Robert Smithson: Sculpture*, 195.
[141] Coplans, "Robert Smithson, 'The Amarillo Ramp,'" 44.

Over the years speculation on additional design inspiration has been plentiful. The mythical whirlpool once thought to connect the Great Salt Lake with the Pacific Ocean through an underground channel is a favorite. Debunked by the 1850s, the legend was still well-known in the 1970s. Smithson learned of it at some point during either his initial research or during construction since it is mentioned in the *Spiral Jetty* film. Smithson scholar Jennifer Roberts argues Smithson may have been inspired by another whirlpool, A *Descent into the Maelstrom*, by Edgar Allen Poe, a short story in Smithson's private collection which he referenced.[142] In addition, Smithson favored science fiction by authors like Brian W. Aldiss that describe entropic landscapes reminiscent of the Great Salt Lake.

Construction

Smithson returned to Utah in April of 1970[143] with $9,000 in financial support from his friend, gallerist, and benefactor, Virginia Dwan, and her gallery in New York City. He received an additional $9,000 from Douglas Chrismas of the ACE Gallery for production of the *Spiral Jetty* film which includes construction footage.[144] To execute his vision, Smithson required a contractor both skilled in working on the precarious mudflats to assess their integrity, and capable of moving tons of rock and earth. After unsuccessfully approaching various contractors, Smithson finally succeeded with Ogden-based Parson Asphalt Products, Inc. This was largely due to the willingness of foreman Bob Phillips to take on the unusual challenge.[145] At the time, Phillips was building mineral evaporation pond dikes on the Great Salt Lake for Great Salt Lake Minerals. He felt Smithson's proposed project required similar skills.

At their first meeting Smithson confirmed he had the required lease, permit from Bureau of Reclamation for rock removal and a reclamation plan for restoring the hillside post-construction. He presented Phillips with drawings of his proposed earthwork, a shape resembling the letter J with a bulb or island at the end.[146] Phillips insisted on the need for engineered plans due to the unstable lakebed and risk to the earth moving equipment. He was also concerned with the resulting integrity of the structure due to lake wave action. Smithson dismissed the need for professionally engineered drawings but returned a couple of days later with his own more detailed drawings to negotiate a contract. Phillips recalls:

> He had it gridded on fifty-foot centers, and he had a cross section of the way he wanted the dikes. I took it, went through it, drawing on it with a red pencil, "No, this is the way the dikes have got to look, and they've got to be at least three feet high, and you've got to put the rock over the top of them. We can't put it underneath like that. He didn't say anything, except, 'Okay, that's fine, when can we get to work?"[147] [Figure 9].

The contract with Parson Asphalt Inc. was accepted for $6,000 and Phillips engaged owner-operator Grant Busenbark as subcontractor. Recalling the project nearly 30 years later Phillips states, "This Busenbark was a real wizard, a master at running the equipment. …He was the only guy who could do

[142] Roberts, *Mirror Travels*, 138.
[143] Smithson, Agenda.
[144] Hobbs, *Robert Smithson: Sculpture,* 191.
[145] Loe, *The Spiral Jetty Encyclo: Exploring Robert Smithson's Earthwork through Time and Place,* 210.
[146] Bob Phillips, "Building the Jetty," in *Robert Smithson Spiral Jetty,* ed. Lynne Cooke and Karen Kelly. (Berkeley: University of California Press, 2005), 185.
[147] Ibid., 188.

that job."[148] To complete the work, "Parson furnished a rubber-tired loader, to load the rocks, and one other dump truck. The five-man crew went out to Rozel Point with the two trucks, the Traxcavator that would work out on the dike, and the other loader for loading the rocks into the trucks from the bank and maintaining the roadway."[149]

Smithson and the team were mindful of the risks involved in operating heavy equipment on the salt crust. The earthwork was staked out to avoid fissures or weak spots where mud would break through and potentially trap the equipment, but some spots could not be avoided.[150] Smithson describes the construction process in "The Spiral Jetty" essay:

> The tail of the spiral began as a diagonal line of stakes that extended into the meandering zone. A string was then extended from a central stake in order to get the coils of the spiral. From the end of the diagonal to the center of the spiral, three curves coiled to the left. Basalt and earth were scooped up from the beach at the beginning of the jetty by the front loader, then deposited in the trucks, whereupon the trucks backed up to the outline of stakes and dumped the material[151] [Figures 14,15,16]

Given the density and angular nature of the basalt, dirt had to be loaded into the truck bed before loading the rock. The sharp basalt rock could also cut a tire. Smithson and the crew struggled to find a balance with Smithson desiring more rock and the crew arguing for more dirt to protect their equipment. According to Phillips "The amount of dirt versus rock was making the Jetty look like a highway with the rocks buried in it."[152]

To solve this, Smithson instructed Busenbark to rip the dike to expose more black rock. The plan worked and after six days the earthwork was complete and the contract executed according to plan [Figures 17,18]. According to Phillips approximately one-week later Smithson called claiming, "It's not right." He had decided the shape was incomplete and should take the form of a counterclockwise spiral collapsing in on itself. Hesitant to return to the site, and fearing for the equipment, Phillips tried earnestly to dissuade him, but Smithson was adamant. An additional $3,000 in compensation was agreed on and the work took three additional days to complete. Most of the material for the coils was taken from the island at the end of the original earthwork.[153] Fellow artist and friend, Richard Serra, assisted Smithson in staking out the final spiral formation [Figure 19].

The finished earthwork required 292 truck hours and 625 labor hours. It was 1,500 feet long (1,200 feet longer than the original design intent submitted in the lease application), fifteen feet wide, three feet tall and approximately 80% rock[154] [Figures 1,20,21]. The artwork was designed to be visible when the lake elevation was 4,197.8 feet or less. At time of execution the lake at Saline near Rozel was 4,195.4', one of the lowest levels in 50 years.

[148] Dan Egan, "Coming Around: First a Joke, Then a Jewel for the Guys that Built the Spiral Jetty," *Salt Lake Tribune,* November 28, 1999.
[149] Phillips, "Building the Jetty," 191.
[150] Smithson, "The Spiral Jetty," 146-147.
[151] Ibid., 146.
[152] Phillips, "Building the Jetty," 192,194.
[153] Ibid.
[154] Smithson and Roth, "An Interview with Robert Smithson (1973)," 92.

Smithson anticipated and desired seasonal fluctuation in lake levels, but he expected overall levels to be relatively steady.[155] He returned several times after it was finished including in August 1971 [Figure 23]. In a letter that year to Mark H. Crystal, his lease contact at the Utah Division of State Lands, Smithson expressed concern for the future of the work (likely in response to rising lake levels):

> My reason for the request rests on the fact that the "Spiral Jetty" is a work of art made by me at my own expense. A perpetual lease would grant me greater security if I should ever have to invest more capital to repair or restore the jetty in the future, or transfer the lease to an art institution, should they want to own the "Spiral Jetty" and have it as a part of their collection to preserve the work for future generations.[156]

Smithson's request was denied. By 1973 the *Spiral Jetty* was completely submerged. When asked about it, "Smithson responded that he would build the piece fifteen feet higher-thus indicating his intention to keep weathering and change within strictly defined limits."[157] However, Smithson did not arrange to raise the earthwork before his death in July 1973. The earthwork would remain submerged for nearly 30 years [Figure 25], appearing only briefly in mid 1990s [Figure 26] before surfacing in 2002 [Figure 27]. The shoreline pulled away for the first time in 2004 [Figure 28]. The final year the artwork was fully submerged with seasonal inflow was 2012 [Figure 29]. The shoreline continued to recede [Figure 30], settling nearly a mile away in 2022 before slowly advancing again in 2023 and 2024.[158]

Additional Historical Information

The Nonsite Component to Spiral Jetty

Due to the distance of Land art from dense population areas, documentation was used by artists to make their artwork accessible to the public. According to scholars, both the *Spiral Jetty* film and "The Spiral Jetty" essay "can be considered as coordinated non-site [sic] aspects of the artwork."[159] Images by professional photographer Gianfranco Gorgoni, among others, have been displayed in art galleries and included in international periodical newspapers. Regarding his *Spiral Jetty* film, Smithson stated: "I consider the film a work of art in itself - since it is about light, color, scale, etc. Museums, schools, and other institutions may buy a copy of the film for $300.00. It then becomes a part of their art collection, like a painting, print, etc."[160] Smithson directed the film during construction and completed filming and editing in New York City with assistance of professional filmmaker, Bob Fiore. The film was shown daily at the Dwan Gallery for four weeks beginning October 31, 1970 [Figure 13]. It was subsequently shown at Ace Gallery in Los Angeles and Vancouver. It remains guarded as an artwork today with limited access.[161] The "The Spiral Jetty*"* essay was written in response to an invitation to contribute to an anthology, *Arts of the Environment,* edited by Gyorgy Kepes in 1972. Scholar Robert Hobbs elaborated on the importance of the documentation to the *Spiral Jetty*: "The context of his art is, then, other works of

[155] Hobbs, *Robert Smithson: Sculpture*, 196.
[156] Robert Smithson, Letter to Mark H. Crystal, December 30, 1971. Robert Smithson and Nancy Holt papers, Archives of American Art, Smithsonian Institution.
[157] Hobbs, *Robert Smithson: Sculpture*, 197.
[158] Author visit on May 14, 2024 revealed approximately one-third to one-half mile distance.
[159] Shapiro, "Spiral Jetty."
[160] Robert Smithson, Letter to Mark Crystal, March 10, 1970 [sic]. Robert Smithson and Nancy Holt papers, Archives of American Art, Smithsonian Institution.
[161] Ibid.

art that enclose it (such as the *Spiral Jetty* film and essay) as well as the larger nonartistic world that surrounds it both physically and intellectually."[162]

Proposed Museum at Rozel Point

In 1971, Smithson sketched out plans for a museum at Rozel Point. He envisioned a "...truncated pyramid composed of a rubble of rocks. Situated mostly underground, the museum could consist of a salt-encrusted subterranean screening room to which one would descend by a spiral staircase." In this subterranean cavern, visitors would watch a screening of the *Spiral Jetty* film. According to Robert Hobbs, the museum would "manifest" the legend of a subterranean whirlpool leading from the Great Salt Lake to the Pacific Ocean.[163] In this way, *Spiral Jetty* would remain visible and accessible even if submerged. Smithson's proposed museum never gained momentum during his lifetime and neither Dia Art Foundation, nor Holt/Smithson Foundation have current plans to realize the museum concept.[164]

Design Context and Contemporaries

As early earthwork artists moved from bringing natural materials indoors to working in the landscape, deserts of the American West provided a vast and alluring destination. New York City based artists including Walter DeMaria, Michael Heizer, Nancy Holt and Robert Smithson left the gallery to produce work in desert environments of California, Nevada, New Mexico and Utah. While each employed different means of expression and approach, they all created site-specific works that used the landscape to evoke a powerful sense of time and place. Lawrence Alloway describes the earthworks as "highly responsive to the given terrain" because "of their realization that duration and scale are in themselves expressive, and that they are best achieved by works of art that do not compete materially with the landscape."[165]

Heizer created his first major earthwork, a sunken cube called *NESW,* in the Sierra Nevada desert in 1967. Smithson and Holt met Heizer in 1968 and that summer they visited him at his *Nine Nevada Depressions* site where Smithson helped dig a trench for *Rift 1*. In 1969, Michael Heizer constructed a monumental earthwork, *Double Negative,* in the remote Nevada desert with $22,000 in financial support from gallerist Virginia Dwan. The piece spans 1,500 feet. Michael Heizer is still actively working in the Nevada desert.

After conceiving *Sun Tunnels* while in Amarillo, Texas in 1973, Holt purchased forty acres in the Great Basin Desert, Utah in 1974, returning in 1975 to begin work on the artwork.[166] Sun Tunnels was completed in June 1976. In this remote landscape she placed four concrete tubes measuring 17 feet long and nine feet in diameter aligned to frame views of winter and summer solstice at sunrise and sunset. The tubes have holes cut out to cast shadows of constellations on the concrete interior. They are "massive but elegant."[167] Her art "...asked questions about how we might understand our place in the world, investigating perception, systems, and place."[168]

[162] Hobbs, *Robert Smithson: Sculpture,* 16.
[163] Ibid., 196.
[164] Lisa Le Feuvre, Executive Director, Holt/Smithson Foundation, interview with author, June 30, 2023.
[165] Lawrence Alloway, "Site Inspection," *Artforum* 15, no. 2 (October 1976): 49. https://www.artforum.com/features/site-inspection-214100/.
[166] Nancy Holt, "Sun Tunnels," *Artforum* 15, no 8 (April 1977), 34.
[167] Beardsley, "Traditional Aspects of New Land Art," 231.
[168] "Nancy Holt Biography," Holt/Smithson Foundation, accessed April 24, 2024 https://holtsmithsonfoundation.org/biography-nancy-holt

DeMaria built his landmark work, *The Lightning Field*, outside Quemado, New Mexico, in the semi-arid basin in 1977. He installed 400 stainless steel poles in a grid formation to "...attract the lightning and thereby to celebrate its power and visual splendor. He wanted a place where one could be alone with a trackless earth and overarching sky to witness their potent interchange through apparently wanton electrical discharge."[169]

Cultural Influences

Indigenous people have hunted and fished along the shores of the Great Salt Lake for thousands of years. Fremont settlements, which appeared after Lake Bonneville receded, concentrated around the wetlands where food sources were located and near caves where shelter could be found. When pioneer settlers arrived in the area in 1847, the site encompassing *Spiral Jetty* was tribal land of the Northwestern Band of the Shoshone Nation[170] who utilized the Promontory mountains as wintering grounds. The Shoshone used place names for Great Salt Lake of "pi'a-pa" and "Tï'tsa-pa," meaning "big or great water" and "bad water."[171] Fur trappers were the first white men to report what they thought was an inland sea in 1822[172] but they offered little geographic context. John Frémont's expedition in 1843 provided the first documented geographical overview and maps which encouraged Mormon pioneers to settle the region around present-day Salt Lake City in 1847. While Salt Lake City was the primary settlement, Mormon leader Brigham Young was eager to expand claimed territory and encouraged settlement to the north and south. In 1849, Orrin Porter Rockwell was the first settler to homestead in present day Box Elder County.[173] The area around Promontory remained unsettled and was used by pioneers for grazing livestock.

Mineral extraction is the oldest industry on the Great Salt Lake. The industry contributes an estimated $1.13 billion annually to the state economy.[174] Primary minerals include sodium chloride, potassium sulfate, magnesium and lithium. Sodium chloride or common salt is the most significant mineral by tons extracted. It is harvested by constructing vast solar ponds where evaporation leads to crystallization. While it is believed Native people used salt from the lake, the first settler to operate a salt extraction enterprise was Charley White in 1850. Silver discovery in nearby Montana in the 1860s boosted salt production on the Great Salt Lake since sodium chloride was used in processing the ore.[175] The railroad's arrival allowed for cheaper transportation, further driving market demand, and encouraging industrial development. One advancement was the creation of dikes in 1873 to control evaporation rates in response to rising lake elevations. The industry continued to grow during the first half of the 20th century with the 1960s experiencing significant infrastructure expansion with the harvesting of magnesium and lithium.[176] In 1967, Great Salt Lake Minerals and Chemicals Corporation began construction on a processing plant

[169] Beardsley, *Earthworks and Beyond: Contemporary Art in the Landscape*, 62.
[170] Huchel, *A History of Box Elder County*, 22.
[171] Ralph V. Chamberlin, "Place and Personal Names of the Gosiute Indians of Utah." *Proceedings of the American Philosophical Society* 52, no. 208 (1913): 9,12. http://www.jstor.org/stable/983995.
[172] Jim Bridger is long believed to have been the first white man to see the Great Salt Lake but recent history challenges that with Canadian fur trapper Etienne Provost who was trapping in areas around Utah Lake.
[173] Huchel, *A History of Box Elder County*, 65.
[174] Utah Department of Environmental Quality, Great Salt Lake Advisory Council, *Economic Significance of the Great Salt Lake to the State of Utah*, by Bioeconomics, Inc., January 26, 2012, 6.
[175] Thatcher, Linda, "The Great Salt Lake Mineral Industry," *Beehive History* 16 (1990): 30-32, https://issuu.com/utah10/docs/beehivehistory16.
[176] Ibid.

and 18,000 acres of evaporation ponds. Excavation contractors gained experience operating heavy machinery on the unstable lakebed and assessing lakebed structure to ensure ponds were not too porous which would cause valuable minerals to sink into the lake.[177] This knowledge would prove essential to successfully building the *Spiral Jetty*.

The oil seeps at Rozel Point were noted by Stansbury in May of 1850 during his expedition to survey the Great Salt Lake.[178] The first well at Rozel Point was drilled approximately a quarter mile from shore in 1896[179] and exploration continued off and on through the 1970s even though the extraction and refining process of the thick bitumen was very costly and difficult.[180] The 1920s saw a rise in oil exploration all over the state of Utah and expectations for output at Rozel Point were high. During this time the Lakeside Oil Company drilled a well and built an offshore rig on piers at Rozel Point.[181] By 1925, a road to Rozel Point accessible by automobiles existed.[182] Estimated production from first drilling to 1965 was between 10,000 and 15,000 barrels.[183] The mid 1960s proved to be the final prolonged period of exploration with 11 wells drilled from 1964-1967 and 2,896 barrels produced between 1965-1970. A 1972 news article summarizes activity at Rozel Point, "In all, thirty-two wells have been sunk at Rozel since the first attempt in 1906. As if foredoomed, each has met with financial disaster of one sort or another. Without getting any closer to solving the mystery, hope has receded with the waters of the Great Salt Lake, leaving only Max and his one working rig, surrounded on all sides by bits of broken dreams and broken bits."[184] The last well was drilled in 1982 before rising lake levels likely halted exploration.[185]

The American White Pelican at Rozel Point

Each year the Great Salt Lake, along with its wetlands and uplands, supports up to 10 million migratory birds who feed and nest along the shores and tributaries. The south arm provides an ecosystem where brine shrimp and brine fly larvae thrive, providing an essential food source for migrating and local bird populations. In contrast, the north arm is typically too saline to support any life except for salt-loving organisms that give the water a distinct pink/red hue. Birds are rarely seen along the shore of the north arm.[186] An exception was the American White Pelican. Once the largest breeding ground for the American White Pelicans in America, Gunnison Island off Rozel Point provided a remote location for the

[177] "Reaping the Minerals in the Great Salt Lake," *Business Week*, October 15, 1966.
[178] Marc T. Eckels, "Oil and Gas History of Utah: Highlights of the Early Years," Petroleum History Institute: Oil-Industry History 17 (2016), 151-152.
[179] Ibid.
[180] Hunt and Chidsey, "Rozel Point Oil Field, Box Elder County, Utah: Geology, Development History, and Cleanup," 254-255.
[181] Walter Jones, "The Growth of Utah's Petroleum Industry," *Beehive History* Vol 16 (1990): 21-24, https://collections.lib.utah.edu/ark:/87278/s6k64hdz.
[182] "Rozel Oil Test to Be Excursion Scene," *Salt Lake Telegram*, April 8, 1925, 10, accessed April 16, 2024, https://newspapers.lib.utah.edu/ark:/87278/s69w1p72/19835437.
[183] Reed T. Searle, James G. Christensen, and Dawn G. Curtis, "The Great Salt Lake," Western Waters Digital Archive (Utah: Office of Legislative Research, June 1976), 112, https://collections.lib.utah.edu/ark:/87278/s6bp025k.
[184] Richard Menzies, "Thar She Blows..Glub, Glub," *Salt Flat News*, February 1972, https://newspapers.lib.utah.edu/details?id=29830151&q=Rozel&parent_i=29830146.
[185] Hunt and Chidsey, "Rozel Point Oil Field, Box Elder County, Utah: Geology, Development History, and Cleanup," 258.
[186] Michael R. Conover and Mark E. Bell, "Importance of Great Salt Lake to Pelagic Birds: Eared Grebes, Phalaropes, Gulls, Ducks, and White Pelicans," in *Great Salt Lake Biology of Change*, in *Great Salt Lake Biology: A Terminal Lake in a Time of Change*, ed. Bonnie K. Baxter, Jaimi K. Butler, (New York: Springer Cham, 2020), 240.

sensitive birds who valued the protective isolation of Gunnison Island over proximity to food sources. They arrived each March to build nests and raise their young. Daily flights over Rozel Point to the Bear River Migratory Bird Refuge and surrounding wetlands, 30 miles to the east, were required for feeding. The carcass of young pelicans at Rozel Point was a common sight as juvenile birds succumbed to the tiring journey. In recent years the shrinking lake exposed a land bridge and trail cameras began detecting coyotes and wolves in 2017.[187] By July of 2023 scientists feared the colony had experienced total collapse.[188] In a surprising turn of events, a small number of White Pelicans returned to Gunnison Island in 2024[189] with the majority seeking out Hat Island for the first time in 80 years.[190]

Summary

The site-specific earthwork, *Spiral Jetty* (1970), by American artist Robert Smithson on the northeastern shore of the Great Salt Lake at Rozel Point is a nationally significant work of art. It is the most well-known work of one of the most important American artists of the twentieth century, and is considered a touchstone of the large-scale Land art that emerged in the late-1960s. Smithson's lifelong interest in the natural world inspired him to take art from the sterile white gallery walls of New York City into an entropic landscape where it could interact with natural processes and be experienced from multiple scales to alter human perception. In doing so, Smithson inspired generations of artists and positively impacted the field of landscape architecture. *Spiral Jetty* retains high integrity in nearly all areas. The earthwork continues to interact with a shoreline in constant flux. In realizing a design that comprehends interaction with the natural environment and evolving human impacts, Smithson created a work of unparalleled aesthetic resiliency and enduring cultural relevance. That dialogue or what Smithson called "dialectic" – both seen and unseen – remains strikingly on display at Rozel Point today.

[187] Leia Larsen, "Thousands of Nesting Birds Have Vanished at Great Salt Lake's Gunnison Island," Salt Lake Tribune, June 30, 2023, https://www.sltrib.com/news/environment/2023/06/30/thousands-nesting-birds-have/.
[188] Jaimi K. Butler, interview with author, October 5, 2023.
[189] During the author's site visit on May 14, 2024, several groups of White Pelicans were seen flying over Rozel Point.
[190] Sofia Jeremias, "Pelicans return to a Great Salt Lake Island for the First Time in Decades," *The Salt Lake Tribune*, May 10, 2024, https://www.sltrib.com/news/environment/2024/05/10/pelicans-return-great-salt-lake/.

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Previous documentation on file (NPS):

____ preliminary determination of individual listing (36 CFR 67) has been requested
____ previously listed in the National Register
____previously determined eligible by the National Register
____designated a National Historic Landmark
____ recorded by Historic American Buildings Survey #_____
____recorded by Historic American Engineering Record # _____
____ recorded by Historic American Landscape Survey # _____

Primary location of additional data:

_X_ State Historic Preservation Office
_X_ Other State agency
____ Federal agency
____ Local government
____ University
_X__ Other
Name of repository: __Archives of American Art, Smithsonian Institution; Utah Department of Natural Resources/Division of Forestry, Fire, State Lands; Holt/Smithson Foundation

Historic Resources Survey Number (if assigned): _____

10. **Geographical Data**

Acreage of Property ____10_____

Use either the UTM system or latitude/longitude coordinates

Latitude/Longitude Coordinates
Datum if other than WGS84:_____
(enter coordinates to 6 decimal places)

1. Latitude: 41.438384 Longitude: -112.669755
2. Latitude: 41.438663 Longitude: -112.666806
3. Latitude: 41.438628 Longitude: -112.666778
4. Latitude: 41.438088 Longitude: -112.665920
5. Latitude: 41.437236 Longitude: -112.667264
6. Latitude: 41.437022 Longitude: -112.669528

Or
UTM References
Datum (indicated on USGS map):

☐ NAD 1927 or ☐ NAD 1983

1. Zone:	Easting:	Northing:
2. Zone:	Easting:	Northing:
3. Zone:	Easting:	Northing:
4. Zone:	Easting :	Northing:

Verbal Boundary Description (Describe the boundaries of the property.)

The nomination boundary is a 10-acre irregular polygon-shaped leased parcel on the lakebed of the Great Salt Lake. It rises from the lakebed floor at a low point of 4194' up to the high-water line of 4212 in the east. The shape is mostly rectangular as it encompasses the outline of the *Spiral Jetty* earthwork. See map for detailed boundary.

Boundary Justification (Explain why the boundaries were selected.)

The nomination boundary was chosen to fully encompasses the *Spiral Jetty* artwork, the only object of significance, and include enough surrounding land to provide sufficient context.

---

11. **Form Prepared By**

name/title: Amy Reid
organization: Utah State University
street & number: 1477 Harvard Avenue
city or town: Salt Lake City state: UT zip code: 84105
e-mail A02349495@USU.edu
telephone: 925.788.5390
date: September 19, 2024

Additional Documentation

Submit the following items with the completed form:

- **Maps:** A **USGS map** or equivalent (7.5 or 15 minute series) indicating the property's location.

- **Sketch map** for historic districts and properties having large acreage or numerous resources. Key all photographs to this map.

- **Additional items:** (Check with the SHPO, TPO, or FPO for any additional items.)

Map 1. *Spiral Jetty* Regional Context Map

Legend

● Spiral Jetty Site

0 5 10 20 30 40 Miles

Source: Utah DNR
Map Scale 1:1,800,000
Projection: WSG 1984 Web Mercator
Box Elder County, Utah

Site Locally

Map 2. *Spiral Jetty* Site Context at Rozel Point

Source: Utah UGRC, Utah DNR
Map Scale 1:24,000
Projection: WSG 1984 Web Mercator
Box Elder County, Utah

Site Locally

Map 3. *Spiral Jetty* Nomination Boundary and Coordinates

Legend

Nomination Boundary

Source: Utah DNR
Map Scale 1:2,500
Projection: WSG 1984 Web Mercator
Box Elder County, Utah

Coordinates

A	41.438384	-112.669755
B	41.438663	-112.666806
C	41.438628	-112.666778
D	41.438088	-112.665920
E	41.437236	-112.667264
F	41.437022	-112.669528

0 300 Feet

Site Locally

Map 4. *Spiral Jetty* Nomination Boundary and Box Elder County Tax Parcel Data

Source: Box Elder County Parcel Data, Utah DNR,
Map Scale 1:8,000
Projection: WSG 1984 Web Mercator

Site Locally

Map 5. *Spiral Jetty* Resource Locations

Legend

Nomination Boundary

Source: Utah DNR
Map Scale 1:2,500
Projection: WSG 1984 Web Mercator
Box Elder County, Utah

Site Resource Locations

A	Spiral Jetty
B	Social Trail
C	Horse / ATV Trail
D	Bench
E	Parking Lot
F	Granite Marker
G	Stone Building Foundation

0 300 Feet

Site Locally

Photographs

Submit clear and descriptive photographs. The size of each image must be 1600x1200 pixels (minimum), 3000x2000 preferred, at 300 ppi (pixels per inch) or larger. Key all photographs to the sketch map. Each photograph must be numbered and that number must correspond to the photograph number on the photo log. For simplicity, the name of the photographer, photo date, etc. may be listed once on the photograph log and doesn't need to be labeled on every photograph.

Photo Log

Name of Property: *Spiral Jetty*

City or Vicinity: Rozel Point

County: Box Elder County State: Utah

Photographer: Amy Reid

Date Photographed: November 13, 2023 and August 28, 2023

Photograph 1. General context view of *Spiral Jetty* and hillside with parking lot and road. Camera view southeast.

Photograph 2. General context view of *Spiral Jetty* and hillside. Camera view northeast.

Photograph 3. General context view extending from the shoreline. Camera view west.

Photograph 4. General context view of *Spiral Jetty* including parking lot and dirt road. Camera view east.

Photograph 5. *Spiral Jetty* and Great Salt Lake shoreline. Camera view west.

Photograph 6. Parking lot at *Spiral Jetty*. Camera view north.

Photograph 7. Six foot wide dirt road north from parking lot at *Spiral Jetty*. Camera view north.

Photograph 8. Parking lot at *Spiral Jetty*. Camera view south.

Photograph 9. *Spiral Jetty* with vegetation and basalt rocks on hillside. Camera view west.

Photograph 10. *Spiral Jetty* and Rozel Hills. Camera view north.

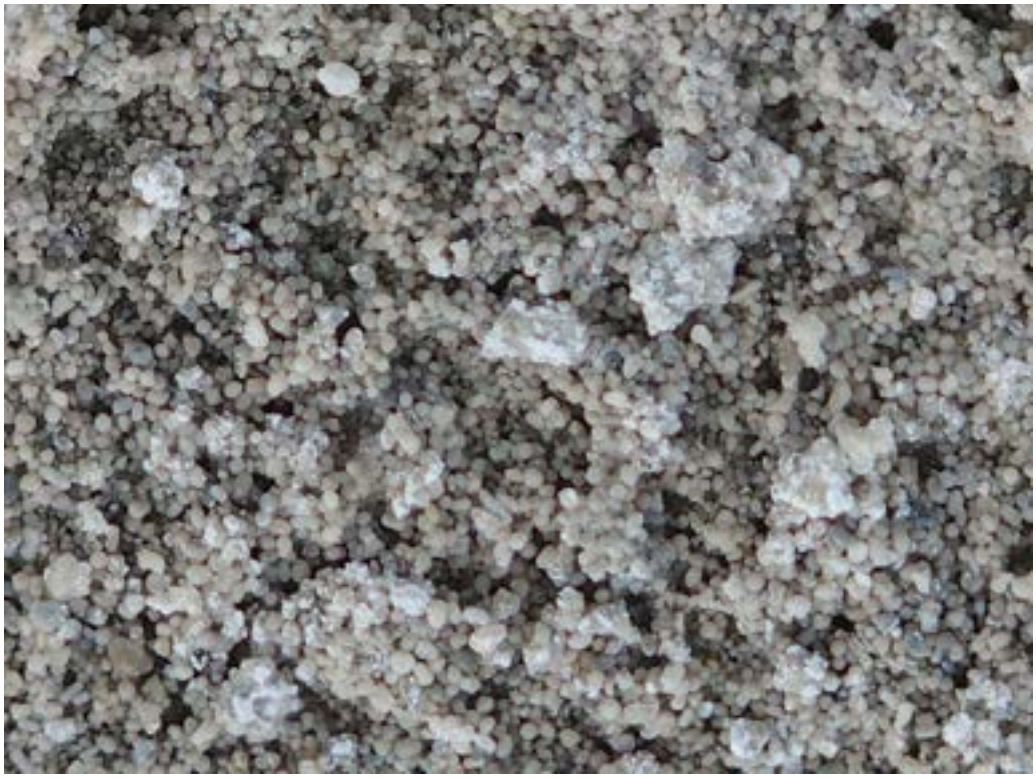
Photograph 11. Tail of *Spiral Jetty* and Rozel Hills. Camera view east.

Photograph 12. Tail of *Spiral Jetty*. Camera view west.

Photograph 13. Tail of *Spiral Jetty* showing slope from earthwork to lakebed. Camera view east.

Photograph 14. Basalt rocks composing *Spiral Jetty*.

Photograph 15. Basalt rocks composing *Spiral Jetty*.



Photograph 16. Oolitic sand at *Spiral Jetty*.

Photograph 17. Basalt rocks on the hillside within the lease boundary. Camera view south.

Photograph 18. Basalt rocks and foliage on hillside within site boundary. Camera view southwest.

Photograph 19. Rozel Oil Field jetty. Camera view facing west.

Photograph 20. Rozel Oil Field surface tar. Camera view facing north towards *Spiral Jetty*.

Photograph 21. Directional sign where road heads northwest. Camera view facing southwest.

Photograph 22. Directional sign where road heads southwest. Camera view facing southwest.

Photograph 23. Directional sign at exit from GSNHP. Camera view facing west.

Figures

Figure 3. Robert Smithson during construction of *Spiral Jetty*, Rozel Point, Great Salt Lake, Utah, in 1970
Photograph: Gianfranco Gorgoni.

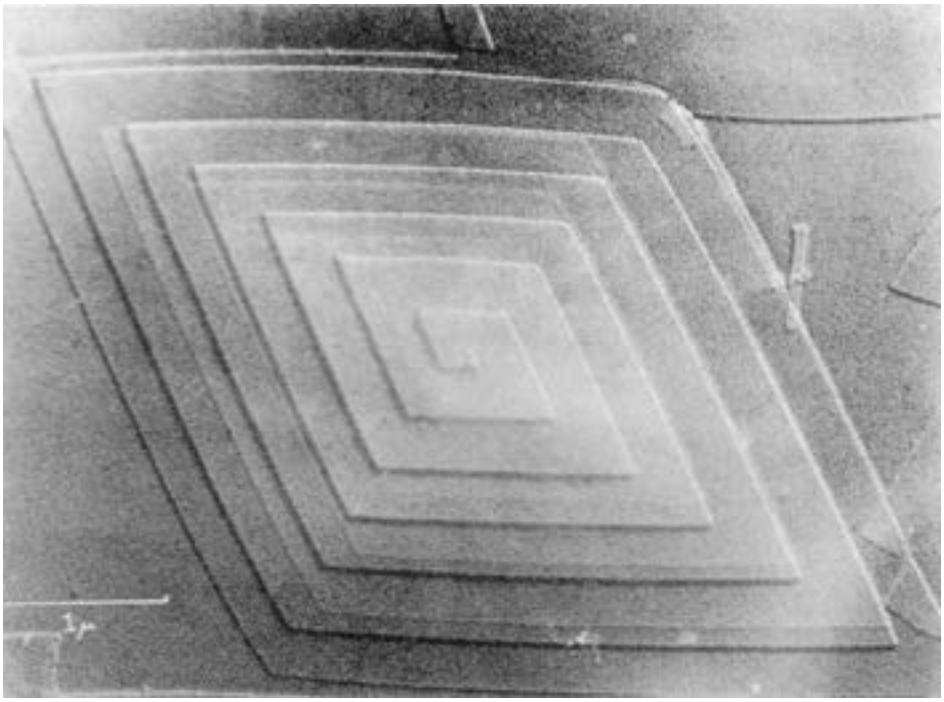


Figure 4. I.M. Dawson Electron Micrograph of screw dislocated Crystal reproduced in Charles William Bunn, *Crystals: Their Role in Nature and Science*, 1964.

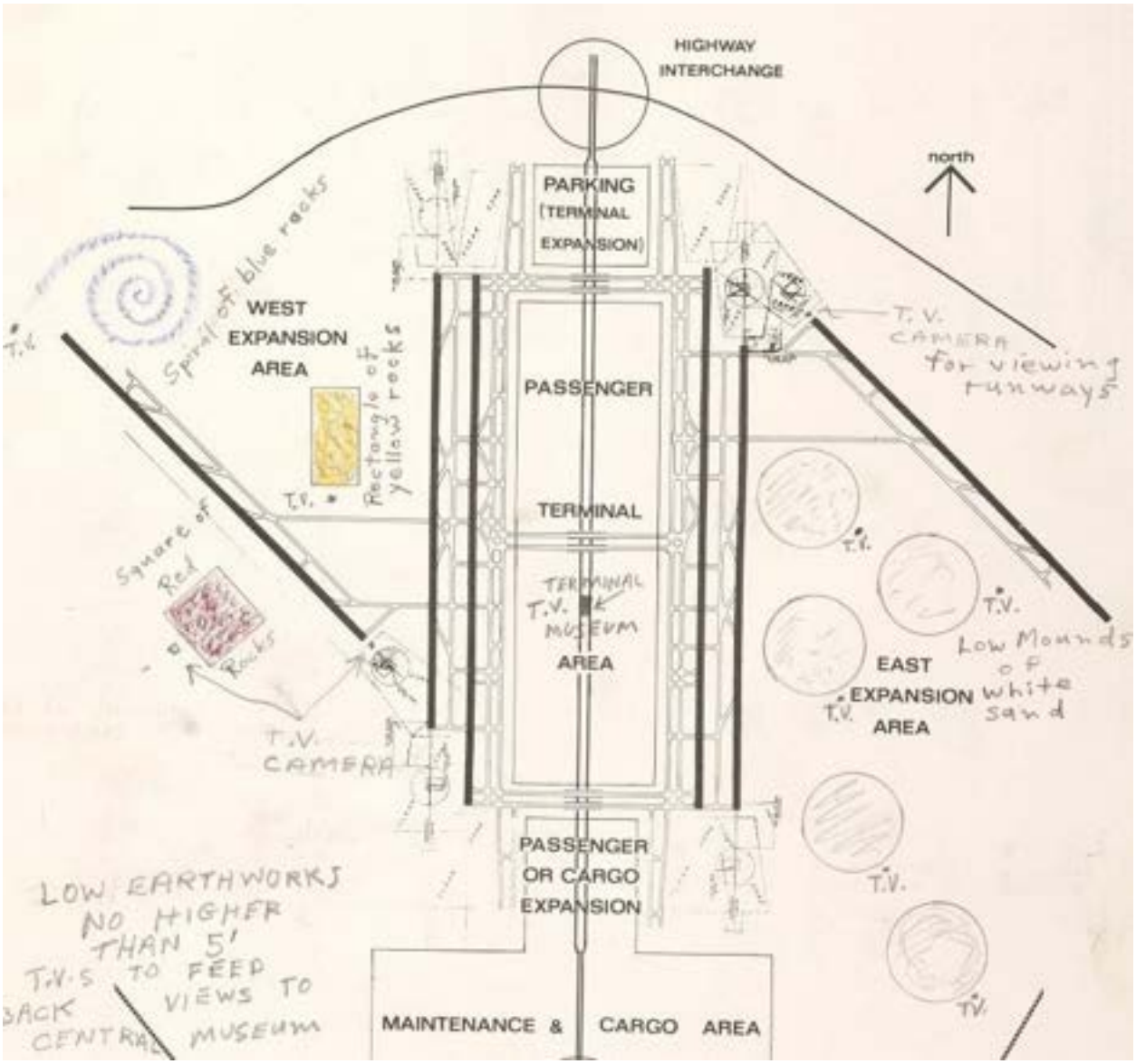


Figure 5. Robert Smithson, *Terminal Area Concepts* (1966)
Collection Archives of American Art, Robert Smithson and Nancy Holt papers, 1905-1987

Figure 6. Robert Smithson, *Project for Clear Zone*, 1967
Pencil on graph paper
11 x 8 ½ in. (27.94 x 21.59 cm)
Collection of the Modern Art Museum of Fort Worth, Gift of the Estate of Robert Smithson

Figure 7. Robert Smithson, *Aerial Map-Proposal for Dallas Fort-Worth Regional Airport* (1967)
Mirrors
52 ½ x 48 ½ x ¼ in. (133.5 x 123.19 x .64 cm)

Figure 8. Robert Smithson, *Gyrostasis* (1968)
Steel and paint
73 ⅝ x 54 ⅛ x 39 ¼ in. (187 x 137.5 x 99.7 cm)
Collection Hirshhorn Museum and Sculpture Garden, Smithsonian Institution, Washington, DC, Gift of Joseph H. Hirshhorn, 1972

Figure 9. Bob Phillips with original *Spiral Jetty* construction drawings by Robert Smithson (1970). Published in *Salt Lake Tribune*, March 7, 2011.

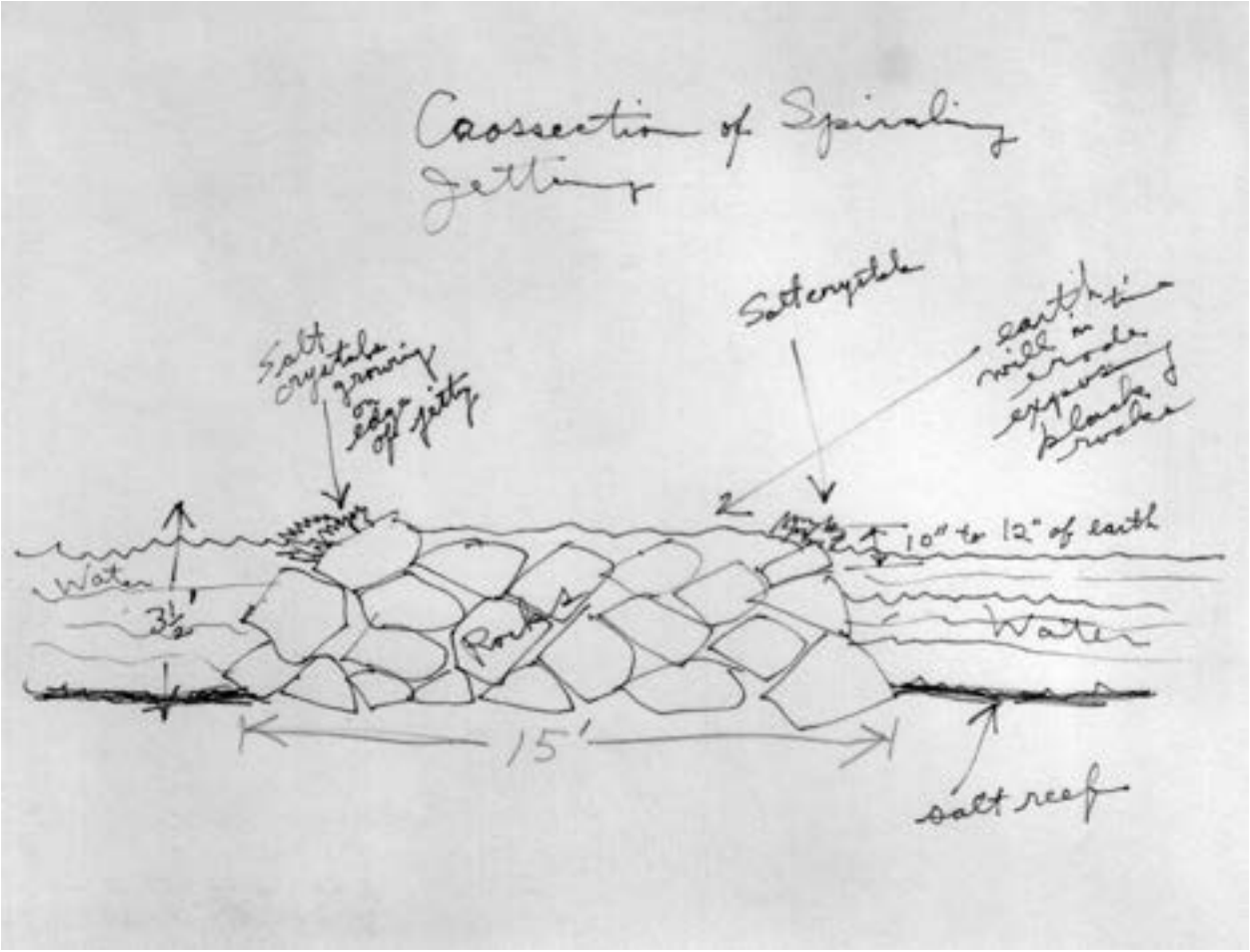


Figure 10. Robert Smithson, *Cross Section of Spiraling Jetty* (1970)
Ink on paper
9 x 12 in. (22.9 x 30.5 cm)
Collection Gail and Tony Ganz

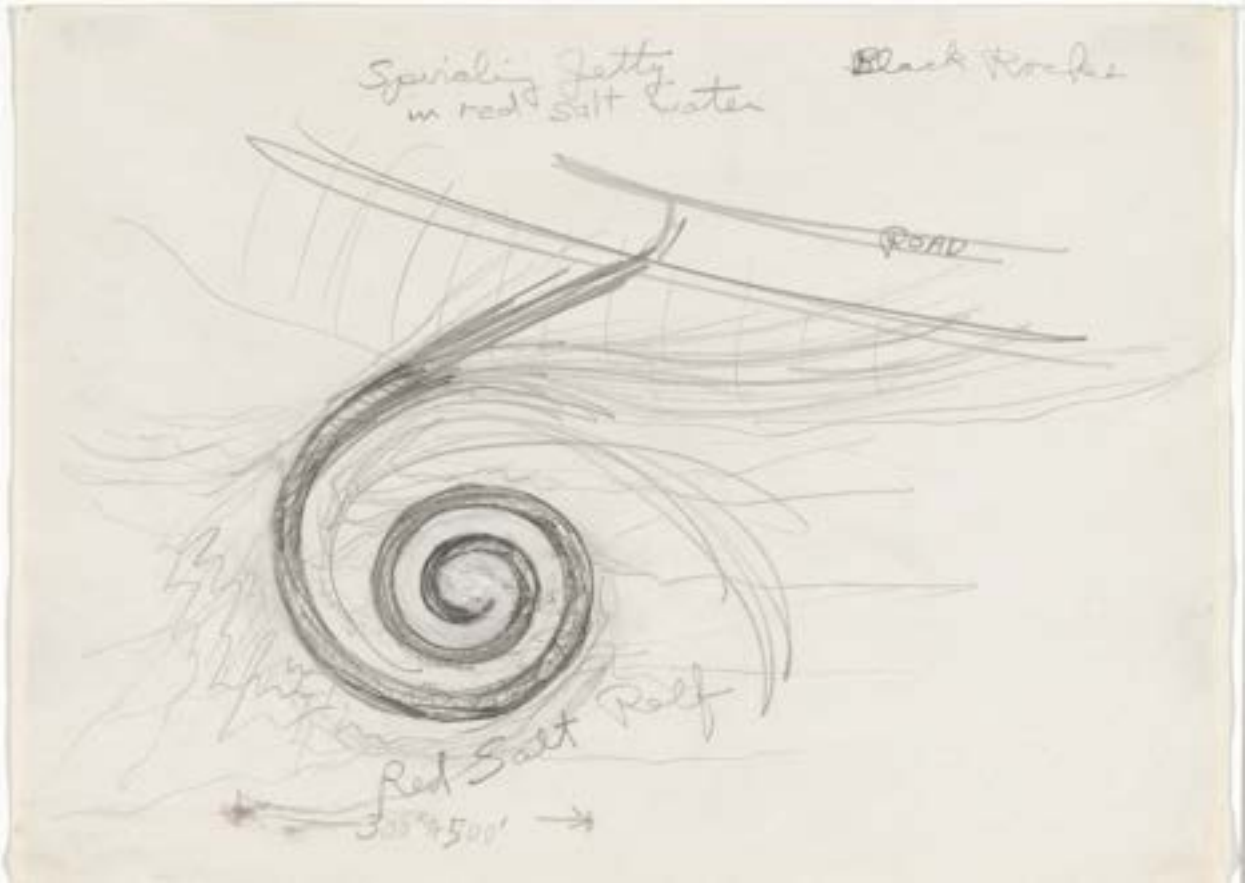


Figure 11. Robert Smithson, *Spiral Jetty in Red Salt Water* (ca. 1970)
Graphite on paper
9 x 11 ⅞ in. (22.9 x 30.2 cm)
Collection The Museum of Modern Art, fractional and promised gift of Tony Ganz in memory of Victor and Sally Ganz

Figure 12. Robert Smithson, *Spiral Jetty with Sun* (1970)
Graphite on paper
12 x 9 in. (30.5 x 22.9 cm)

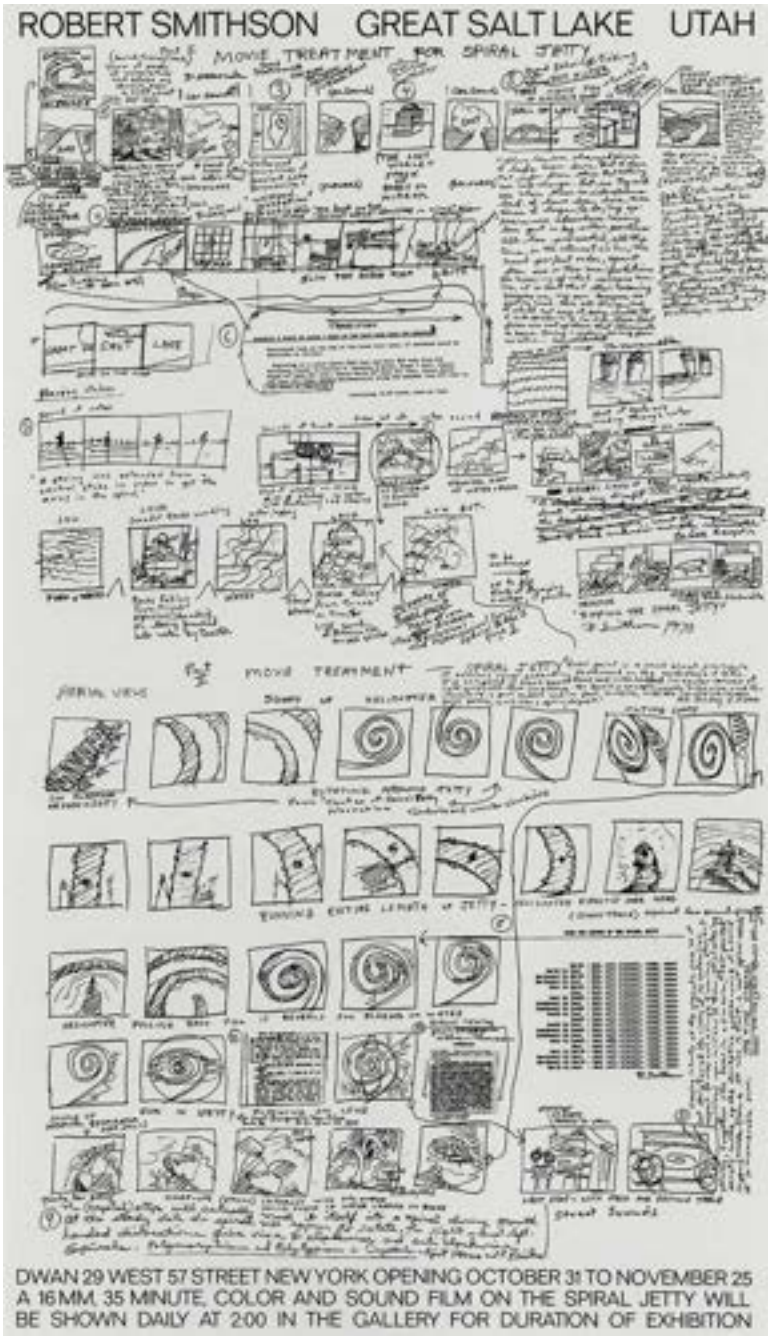


Figure 13. Robert Smithson, *Movie Treatment Poster for Spiral Jetty* (1970)
Poster
38 x 22 in. (96.5 x 55.9 cm)

Figure 14. Construction image of Robert Smithson's *Spiral Jetty* (1970)
Rozel Point, Great Salt Lake, Utah
Mud, precipitated salt crystals, rocks, water
1,500 ft. (457.2 meters) long and 15 ft. (4.6 meters) wide
Collection of Dia Art Foundation
Photograph: Nancy Holt, 1970

Figure 15. Construction image of Robert Smithson's *Spiral Jetty* (1970)
Rozel Point, Great Salt Lake, Utah
Mud, precipitated salt crystals, rocks, water
1,500 ft. (457.2 meters) long and 15 ft. (4.6 meters) wide
Collection of Dia Art Foundation
Photograph: Nancy Holt, 1970

Figure 16. Construction image of Robert Smithson's *Spiral Jetty* (1970)
Rozel Point, Great Salt Lake, Utah
Mud, precipitated salt crystals, rocks, water
1,500 ft. (457.2 meters) long and 15 ft. (4.6 meters) wide
Collection of Dia Art Foundation
Photograph: Nancy Holt, 1970

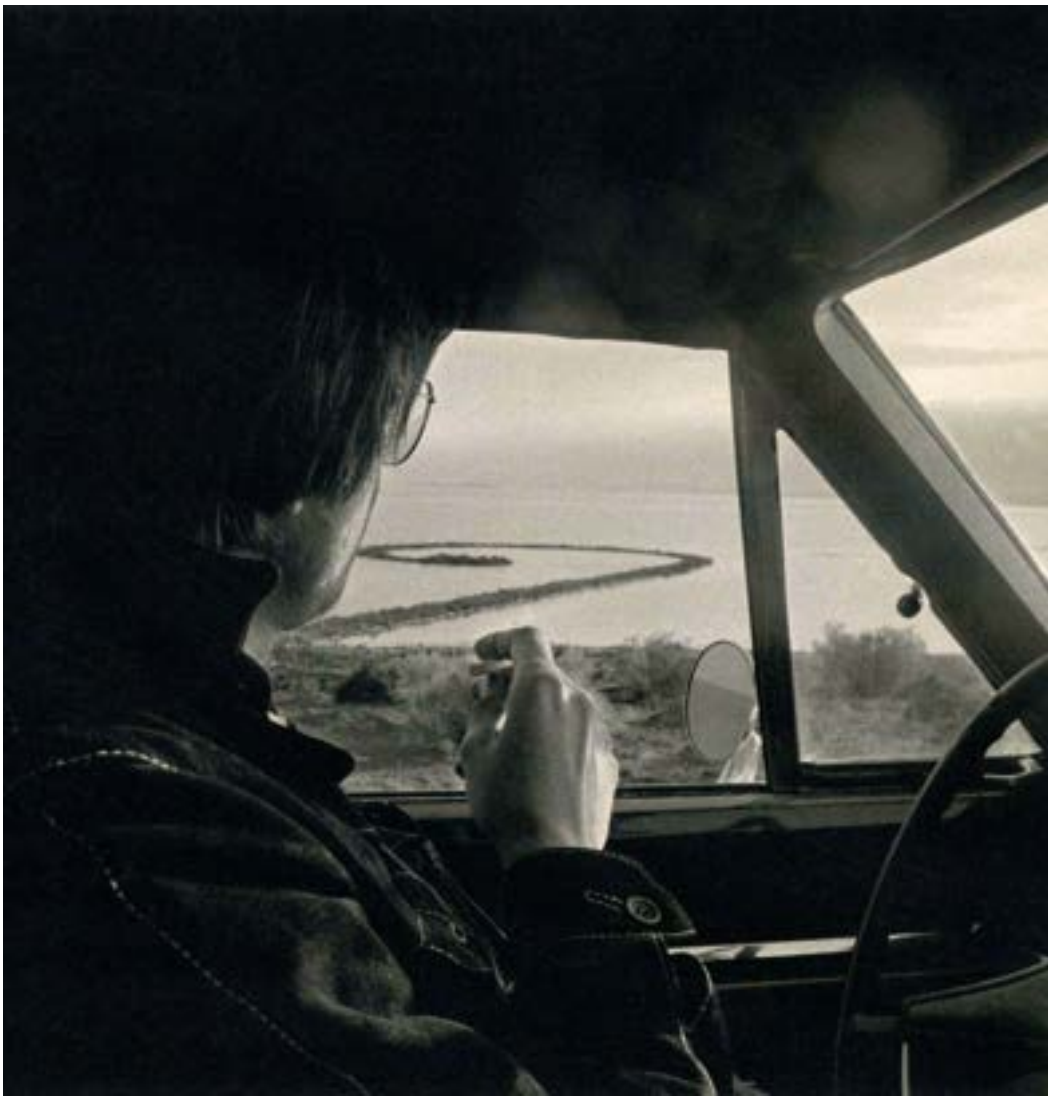


Figure 17: Robert Smithson during the construction of *Spiral Jetty* on the Great Salt Lake, Utah, in 1970
Photograph: Gianfranco Gorgoni

Figure 18. The initial shape of Robert Smithson's *Spiral Jetty* (1970)
Great Salt Lake, Utah
Collection of Dia Art Foundation
Photograph: Gianfranco Gorgoni, 1970

Figure 19. Robert Smithson and Richard Serra during the construction of Smithson's *Spiral Jetty* on the Great Salt Lake, Utah in 1970
Photograph: Gianfranco Gorgoni

Figure 20. Robert Smithson, *Spiral Jetty* (1970)
Great Salt Lake, Utah
Mud, precipitated salt crystals, rocks, water
1,500 ft. (457.2 meters) long and 15 ft. (4.6 meters) wide
Collection of Dia Art Foundation
Photograph: Gianfranco Gorgoni, 1970

Figure 21. Robert Smithson, *Spiral Jetty* (1970)
Great Salt Lake, Utah
Mud, precipitated salt crystals, rocks, water
1,500 ft. (457.2 meters) long and 15 ft. (4.6 meters) wide
Collection of Dia Art Foundation
Photograph: Robert Smithson, 1970

Figure 22. Robert Smithson walking on *Spiral Jetty*, Rozel Point, Great Salt Lake, Utah, in 1970
Photograph: Gianfranco Gorgoni

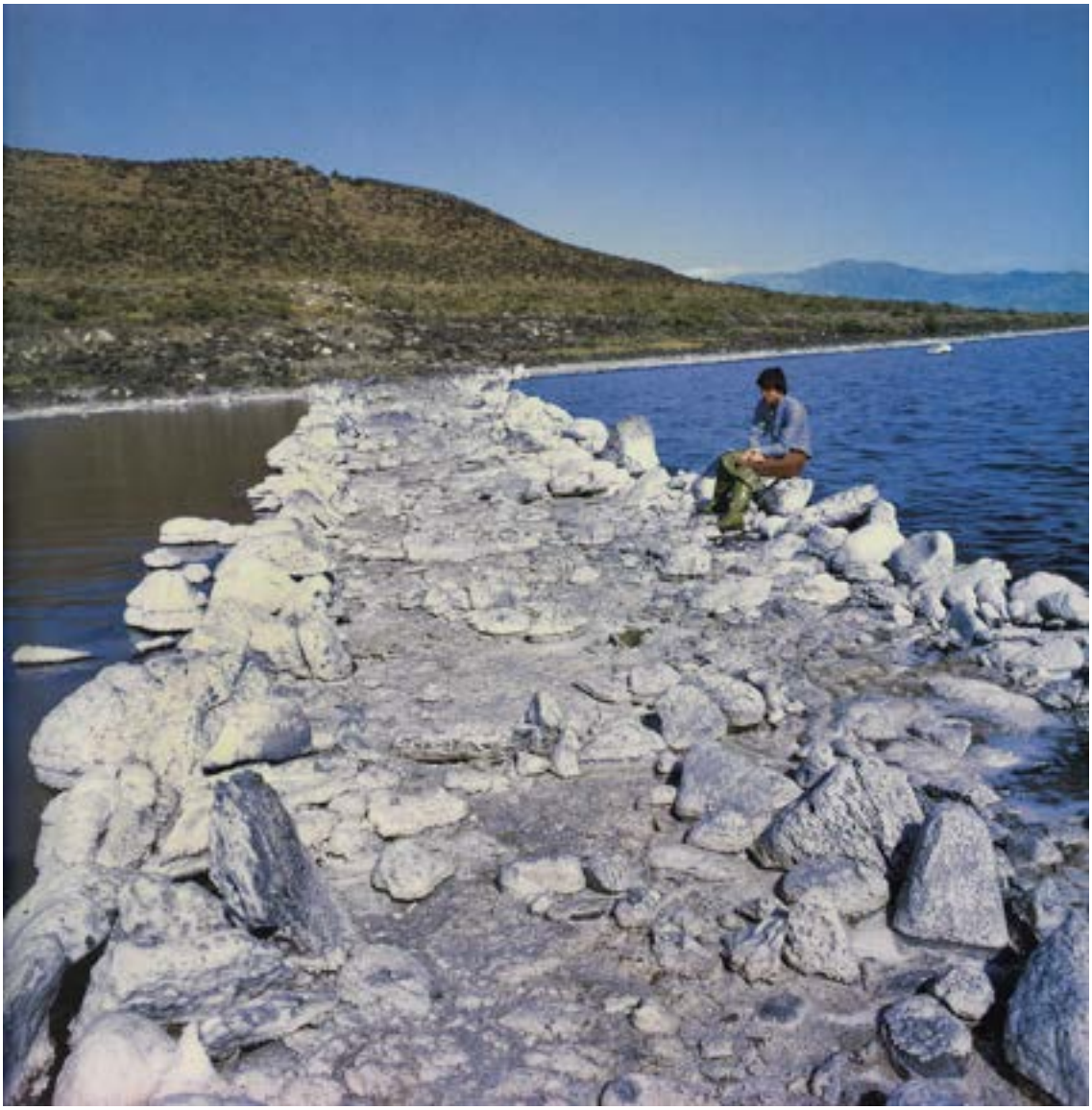


Figure 23. Robert Smithson at *Spiral Jetty* (1970) in August of 1971
Photograph: Nancy Holt
Spiral Jetty is in the collection of Dia Art Foundation and is © Holt/Smithson Foundation and Dia Art Foundation
Photograph © Holt/Smithson Foundation / Licensed by Artists Rights Society, New York

Figure 24. Robert Smithson, *Spiral Jetty* [still] (1970)
16mm film
Color, sound
Duration: 35 minutes

Distributed by Electronic Arts Intermix, New York

Figure 25. Robert Smithson, *Spiral Jetty* (1970)
Great Salt Lake, Utah
Mud, precipitated salt crystals, rocks, water
1,500 ft. (457.2 meters) long and 15 ft. (4.6 meters) wide
Collection of Dia Art Foundation
Photograph: Atsushi Fujie, 1990

Figure 26: Robert Smithson, *Spiral Jetty* (1970)
Great Salt Lake, Utah
Mud, precipitated salt crystals, rocks, water
1,500 ft. (457.2 meters) long and 15 ft. (4.6 meters) wide
Collection of Dia Art Foundation
Photograph: Nancy Holt, November 1995

Figure 27. Robert Smithson, *Spiral Jetty* (1970)
Great Salt Lake, Utah
Mud, precipitated salt crystals, rocks, water
1,500 ft. (457.2 meters) long and 15 ft. (4.6 meters) wide
Collection of Dia Art Foundation
Photograph: Matthew Coolidge, 2002

Figure 28. Robert Smithson, *Spiral Jetty* (1970)
Great Salt Lake, Utah
Mud, precipitated salt crystals, rocks, water
1,500 ft. (457.2 meters) long and 15 ft. (4.6 meters) wide
Collection of Dia Art Foundation
Photograph: Matthew Coolidge, 2004

Figure 29. Robert Smithson, *Spiral Jetty* (1970)
Great Salt Lake, Utah
Mud, precipitated salt crystals, rocks, water
1,500 ft. (457.2 meters) long and 15 ft. (4.6 meters) wide
Collection of Dia Art Foundation
Photograph: Dia Art Foundation aerial imagery, 2012

Figure 30. Robert Smithson, *Spiral Jetty* (1970)
Great Salt Lake, Utah
Mud, precipitated salt crystals, rocks, water
1,500 ft. (457.2 meters) long and 15 ft. (4.6 meters) wide
Collection of Dia Art Foundation
Photograph: Julio Cortez, 2020

Figure 31. Robert Smithson, *Broken Circle / Spiral Hill* (1971)
Emmen, The Netherlands

Broken Circle
Water, sand and boulder
Diameter: 140 ft. (42.6 m); canal: 12 ft. (3.6 m) wide, 10-15 ft. (3-4.5 m) deep

Spiral Hill
Earth, topsoil, sand
Diameter: 75 ft. (22.9 m) at base

Figure 32. Robert Smithson, *Amarillo Ramp* (1973)
Tecovas Lake, Amarillo, Texas
Diameter: 140 ft. (42.7 m)
Height: Ground level to 15 ft. (4.6 m)
Photographer yet to be identified

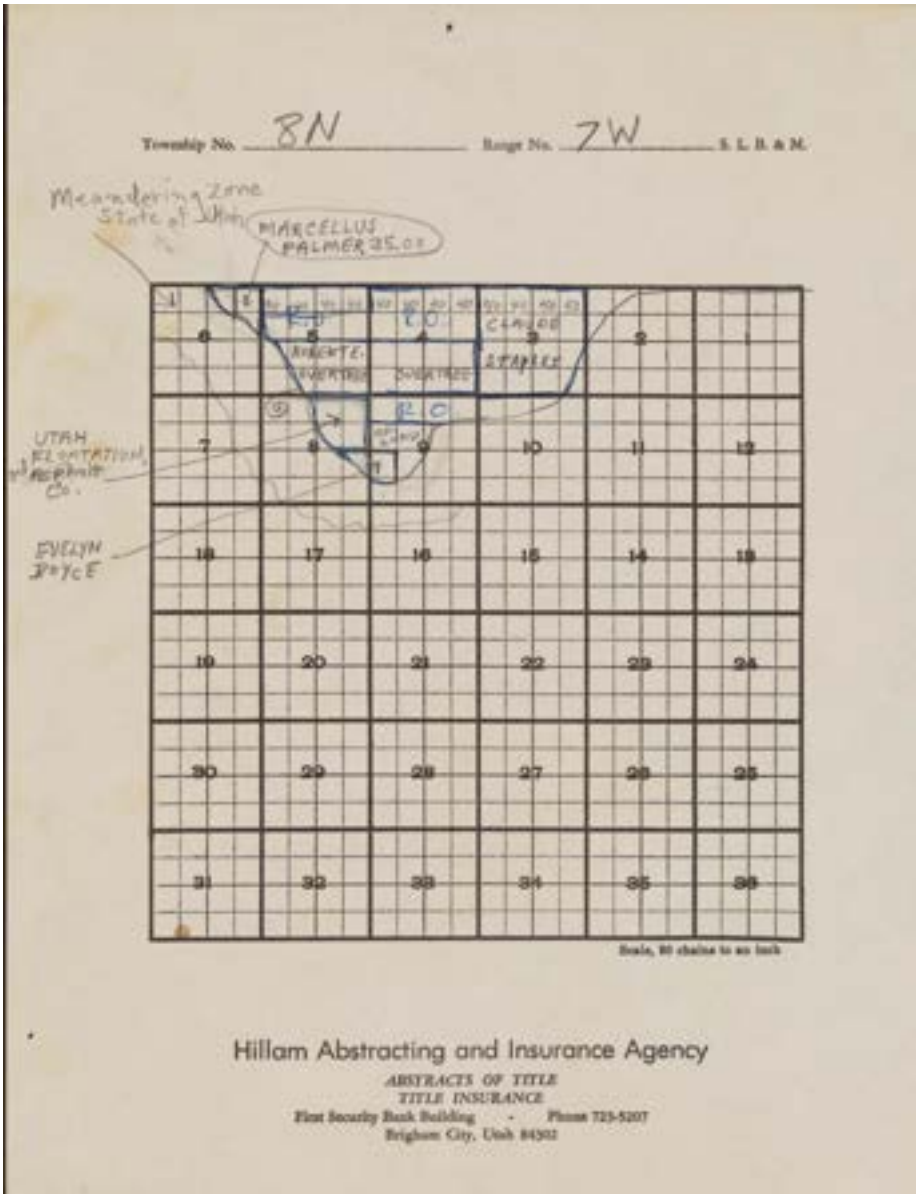


Figure 33. Robert Smithson map of 1970 Box Elder County tax parcel ownership at Rozel Point
Source: Robert Smithson and Nancy Holt papers, Archives of American Art, Smithsonian Institution

Property Owner information:
(Complete this item at the request of the SHPO or FPO.)
Name Utah Department of Natural Resources, Division of Forestry, Fire & State Lands
Address 1594 W North Temple Street, #3520
City or Town Salt Lake City State UT Zip code 84116
Telephone/email 801.538.5418 mweinberg@utah.gov

Property Owner information:
(Complete this item at the request of the SHPO or FPO.)
Name Dia Art Foundation c/o Mr. Jordan Carter, Curator
Address 537 W 22nd Street
City or Town New York City State NY Zip code 10011
Telephone/email 212.989.5566 jcarter@diaart.org

SIGNIFICANCE

The National Register of Historic Places includes over 90,000 listings, two of which are for Land art sites. The first, *Opus 40,* was created by Harvey Fite in New York over several decades beginning in the late 1930s. It was listed on the National Register of Historic Places in 2001. The second is *Untitled: (Johnson Pit #30)* by Robert Morris in SeaTac, Washington. An important distinction between the Morris earthwork and the *Spiral Jetty* is site selection. The former gravel pit site transformed by Morris was selected by a committee for the 1979 Earthworks Symposium. The *Spiral Jetty* would be the first 1960s-1970s era Land art site nominated to the National Register of Historic Places where the site was selected by the artist. This is significant since for land artists, the setting is considered part of the artwork. Lawrence Alloway explains, "The form of the sculpture cannot be separated from the terrain it occupies (it has zero mobility), and the distances that have to be traveled are a part of the content also."[49] With many Land art earthworks entering age eligibility (50 year threshold), this nomination can serve as a helpful precedent.

In addition, a listing on the National Register of Historic Places can provide opportunities for grant funding. The *Spiral Jetty* site is experiencing strain due to rise in visitation. Funding can look at possible opportunities for site infrastructure like bathrooms outside viewshed and ways to address possible erosion due to visitation. Another benefit will be an increased awareness of cultural landscapes in Utah. In the face of rapid population growth, cultural heritage must be identified, celebrated and protected to ensure ongoing survival. Finally, a listing to the National Register will undoubtedly highlight the Great Salt Lake's ecological plight and hopefully encourage further conversations around strategies for ensuring its survival.

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[49] Lawrence Alloway, "Site Inspection," *Artforum* 15, no. 2 (October 1976), 51.

ADDITIONAL RESEARCH

While this thesis identified several prominent landscape architects who cited Smithson's influence in their practice, a wider survey would undoubtedly reveal many more. Conducting a visual assessment of their work could be done to: 1) find common themes and forms; 2) assess evolution of designs and tangential focus over time; and 3) identify additional sources of inspiration (e.g., art, literature, philosophy, etc).

In addition, the use of geospatial analysis for Land art documentation and stewardship is an area that should be explored. Remote sensing for cultural heritage management is a growing field. Unfortunately, the lack of sufficient high resolution imagery, and the inability to secure it, prevented geospatial analysis of *Spiral Jetty*. Future nominations for Land art inclusion in the National Register might consider this research tool when appropriate.

CONCLUSION

Smithson's *Spiral Jetty* reframed the landscape for many artists and landscape architects. At Rozel Point Smithson incorporated natural processes into art where "nature is never finished"[50] and human impact is never hidden. The conversation in the landscape was intentional and integral to Smithson's view of nature and man. Smithson's contribution to the field was groundbreaking and remains highly relevant today. A listing in the National Register of Historic Places will provide formal recognition of the site's national significance in the shaping of American culture and built landscapes.

In recent years the Great Salt Lake has rapidly withdrawn from the shoreline at Rozel Point, leaving *Spiral Jetty* surrounded by a sea of gray oolitic sand instead of red-tinted water.

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[50] Robert Smithson, "Cultural Confinement," in *Robert Smithson: The Collected Writings*, ed. Jack Flam (Berkeley, University of California Press, 1996), 155.

Lying alone in the vast landscape, the *Spiral Jetty* is a stark visual of human impact on a closed system. Smithson's description of entropy feels eerily applicable to the Great Salt Lake today, "You have a closed system which eventually deteriorates and starts to break apart and there's no way that you can really piece it back together again."[51] Entropy, Smithson claims, is "a condition that's moving towards a gradual equilibrium." What will equilibrium look like for the Great Salt Lake? Ultimately that depends on the balance we find with nature. Those of us who live in proximity to the magnificent Great Salt Lake are holding our breath, waiting to find out.

[51] Ibid, 301.

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