

# N O R T H F O R K P A R K

*Ogden Valley, Utah*

## Proposed International Dark Sky Park

Application for IDA Accreditation

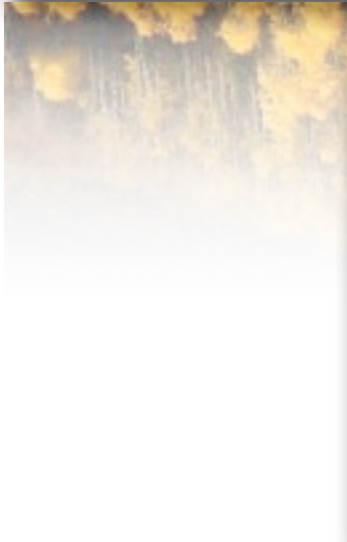
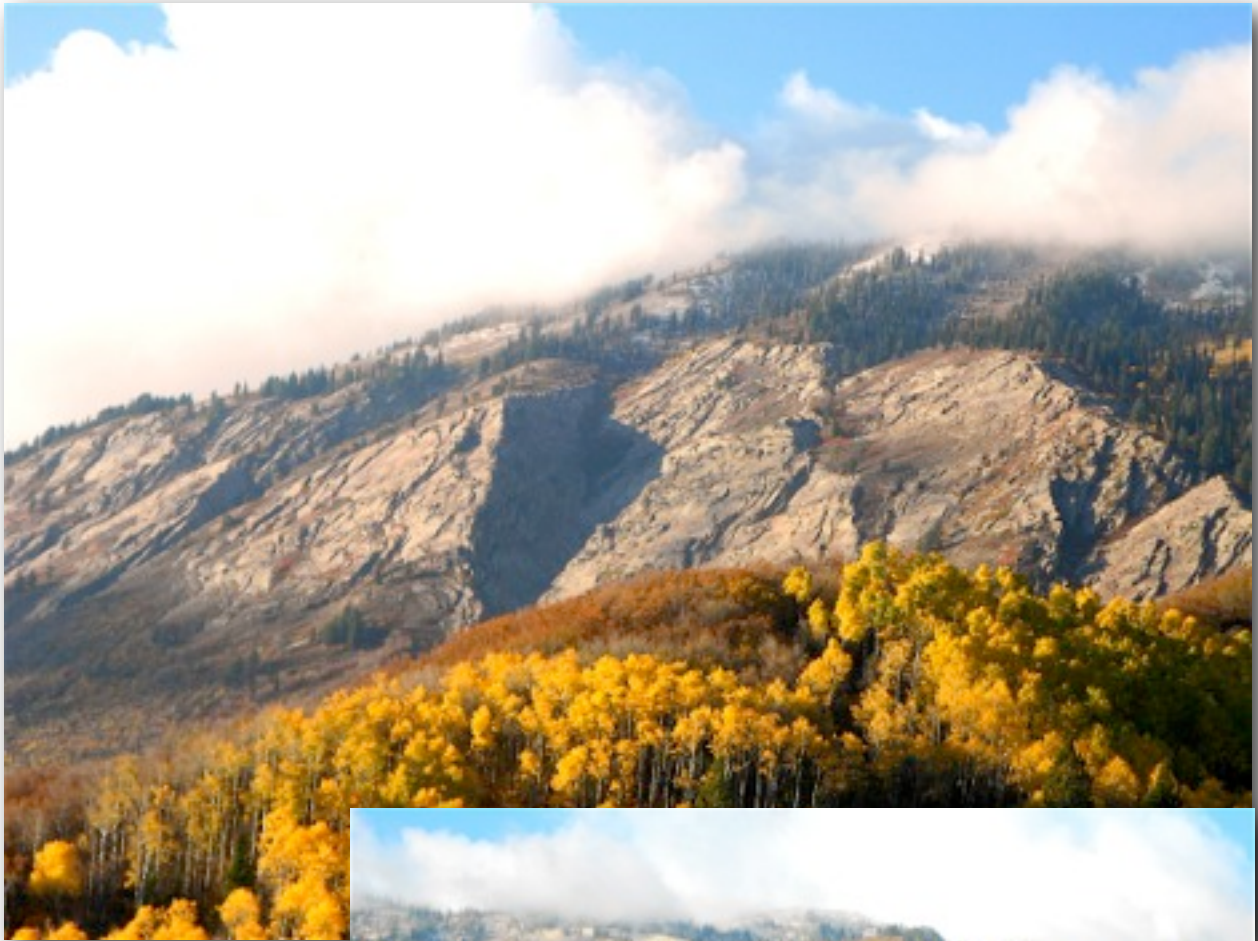
*January 26, 2015*



**Ben Lomond Peak Overlooking North Fork Park and the Wasatch Front**  
*[photograph: Casey Grimley]*



## North Fork Park



### September Splendor

*(photographs: Ogden Valley IDA Chapter)*



## North Fork Park



Approach to Designated Dark Sky Viewing Area (Old Shooting Range, between Middle and North Gates)  
(*photograph: Casey Grimley*)

## North Fork Park

### The Beehive Cluster

Utah is one of only two states to have a state astronomical symbol. Lawmakers passed House Bill 140 in 1996, the hundredth anniversary of statehood, designating a group of stars known as The Beehive Cluster (an open cluster in Cancer, photo below).

"This symbol, composed of a hive of stars, transposes our beehive symbol to a new and grand level as we enter our second century as a group of people living in a place where we can still see, with our own eyes, the beautiful and dim features of the starry universe."



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## North Fork Park



Historic Shoshone and Pioneer Trail Over the Wasatch Mountains Into Ogden Valley



# North Fork Park



## Overview

Nominators (Weber County Parks and Ogden Valley IDA Chapter) and Collaborators [Weber State University and Ogden Astronomical Society] have worked together<sup>1</sup> to produce this application for accreditation of North Fork Park as an International Dark Sky Park.

### North Fork Park

Named for a tributary of the Ogden River and located in Weber County (UT), North Fork Park<sup>2</sup> can be reached in little more than an hour by automobile from the Salt Lake International Airport. Uncommonly large for a county park at 2,465 acres, it lies in elevation between 5800 and 6200 feet and is bounded on

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<sup>1</sup> [with the technical assistance of Supporter Utah Division of Wildlife Resources (Northern Region)]

<sup>2</sup><http://www.co.weber.ut.us/parks/nfpark.php>



## North Fork Park

three sides by the famed Wasatch Mountains, “sculpted by glaciers, yielding notably rugged, sweeping upland scenery,”<sup>3</sup> one of several western edges of the Rocky Mountains.

The park occupies the northern end of the celebrated Ogden Valley, known for its Shoshone, trapper and pioneer histories and an exceptional scenic beauty that has long attracted not only writers and artists, but also ranchers, farmers, and ordinary folks seeking an extraordinary residential setting.<sup>4</sup>



The southern end of Ogden Valley is occupied by the 1800-acre Trappist Monastery, *Abbey of Our Lady of the Holy Trinity*<sup>5</sup> (left), itself notable as being of the Order of the Cistercians of Strict Observance<sup>6</sup> (in recent times closely associated with the writings of Thomas Merton<sup>7</sup>) and having been constructed from war surplus (“swords into plough shares”) material. Ogden Valley has long been a special place for reflection and the quiet ceremonies of life.

Were it to become accredited, North Fork Park would be, Nominators believe, a new kind of International Dark Sky Park with (in addition to its unusually spectacular setting) four points of distinction:

- ▶ Urban Adjacency
- ▶ Intense Wildlife Focus
- ▶ Extensive Educational Reach
- ▶ Innovative Public Art

### Urban Adjacency



Accreditation of North Fork Park offers an unusual, possibly unique, opportunity for the IDA to extend public dark sky education to urban-dwellers. The park lies 50 miles northeast of Salt Lake City, just over the mountains from Ogden-

<sup>3</sup> [http://en.wikipedia.org/wiki/Wasatch\\_Range](http://en.wikipedia.org/wiki/Wasatch_Range)

<sup>4</sup> Recently joined by, through Summit Series and Summit Mountain Holding Group, a diverse set of international entrepreneurs and global thinkers establishing residences at Summit Eden. [[www.summit.co](http://www.summit.co)].

<sup>5</sup> <http://en.wikipedia.org/wiki/Trappists>

<sup>6</sup> <http://www.holytrinityabbey.org>

<sup>7</sup> <http://merton.org>

## North Fork Park

Clearfield, together the largest CSA<sup>8</sup> in the state. North Fork Park is protected from the highly light-polluted (Bortle readings equal to those of the Los Angeles Basin)<sup>9</sup> Wasatch Front<sup>10</sup> (see urban glare in photograph, right, by Casey Grimley) by its topography: mountains block light on three sides.

Utah is one of the most urbanized states in the union. Its density (90% of the population lives on a thin 1% strip of land) ranks Utah as the 8<sup>th</sup> most urbanized state, leading New York and Illinois.<sup>11</sup> Further, Utah's growth rate is 2<sup>nd</sup> highest<sup>12</sup> in all 50 states resulting in the country's youngest population.<sup>13</sup> Salt Lake County alone has more residents than eight states (Wyoming, Montana, Alaska, Vermont, Delaware, Rhode Island, North and South Dakota) individually.<sup>14</sup> The population of the Wasatch Front - spilling over into the Wasatch Back (particularly Ogden Valley and the better-known Park City/Deer Valley area) - is expected to grow by 67% in the next 30 years.<sup>15</sup>



And yet, respite from the “brightness blight” is easily accessible to the current 2.2 million Wasatch Front residents who can reach North Fork Park by not only a well-engineered canyon road that continues

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<sup>8</sup> Combined Statistical Area: Salt Lake-Clearfield-Ogden. Northern Utah is served by the *Standard Examiner*, the third largest (by circulation) newspaper in the state after the *Salt Lake Tribune* and LDS-church-owned *Deseret News*

<sup>9</sup> [<http://catalystmagazine.net/blogs/item/1978-the-brightness-blight>]

<sup>10</sup> [[http://en.wikipedia.org/wiki/Wasatch\\_Front](http://en.wikipedia.org/wiki/Wasatch_Front)]

<sup>11</sup> Salt Lake Tribune, *Urbanites: Nine of Ten Utahns Live on One Percent of State Land*, March 26, 2012 <http://www.sltrib.com/sltrib/politics/53794385-90/areas-census-concentration-front.html.csp>

<sup>12</sup> <http://www.sltrib.com/sltrib/politics/57333406-90/utah-census-growth-percent.html.csp>

<sup>13</sup> [<http://www.newscastic.com/news/14-national-rankings-where-utah-shines-1482684/>]

<sup>14</sup> <http://www.sltrib.com/sltrib/opinion/57769964-82/utah-county-growth-wasatch.html.csp>

<sup>15</sup> *Salt Lake Tribune*, April 5, 2014 “Cozying Up: Urban Sprawl is Bad for Everyone” (Tribune Editorial Board)

## North Fork Park

through Ogden Valley,<sup>16</sup> but also a loop road from Interstate-84 and a year-round mountain road over North Ogden Pass (the historic Shoshone and pioneer route).

North Fork Park's location is strategic in the broader landscape. If accredited, the Park would constitute a high-profile dark sky anchor in Northern Utah, well-positioned to achieve some measure of the success Southern Utah enjoys with astro-tourism,<sup>17</sup> contributing to the ability of the region to offer multiple premier star-gazing opportunities to local, national and global visitors.

With proximity, multiple access routes, and excellent night-sky quality, North Fork Park is positioned to become the first<sup>18</sup> urban-adjacent International Dark Sky Park, joining a growing global concentration of accredited and aspiring International Dark Sky Parks.



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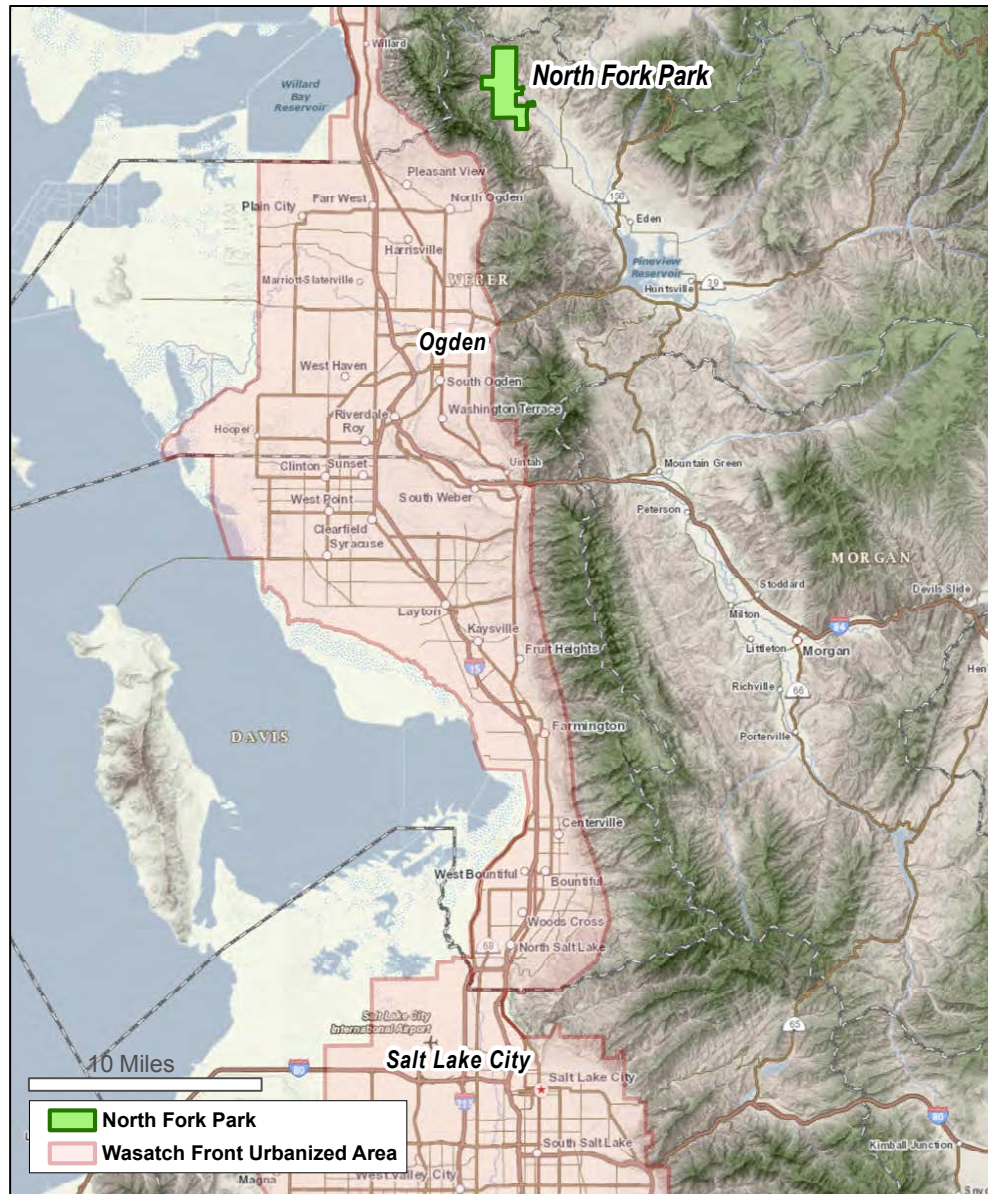
<sup>16</sup> Google map of North Fork Park and access from Wasatch Front: [<https://maps.google.com/maps?f=d&hl=en&saddr=I-15,+ogden,+ut&daddr=North+Fork+Park&layer=&sll=41.315466,-111.982956&sspn=0.364105,0.629654&ie=UTF8&z=11&ll=41.291222,-111.94725&spn=0.36424,0.629654&om=1>]

<sup>17</sup> [http://www.utah.com/extreme\\_sports/astrotourism.htm](http://www.utah.com/extreme_sports/astrotourism.htm)

<sup>18</sup> Or second: Oracle State Park, 20 miles outside of Tucson, was named an IDSP in November 2014.

## North Fork Park

North Fork Park: Proximate to the Wasatch Front and Utah's Largest CSA<sup>19</sup>



Map prepared by Travis Lund and Jeremy Bryson



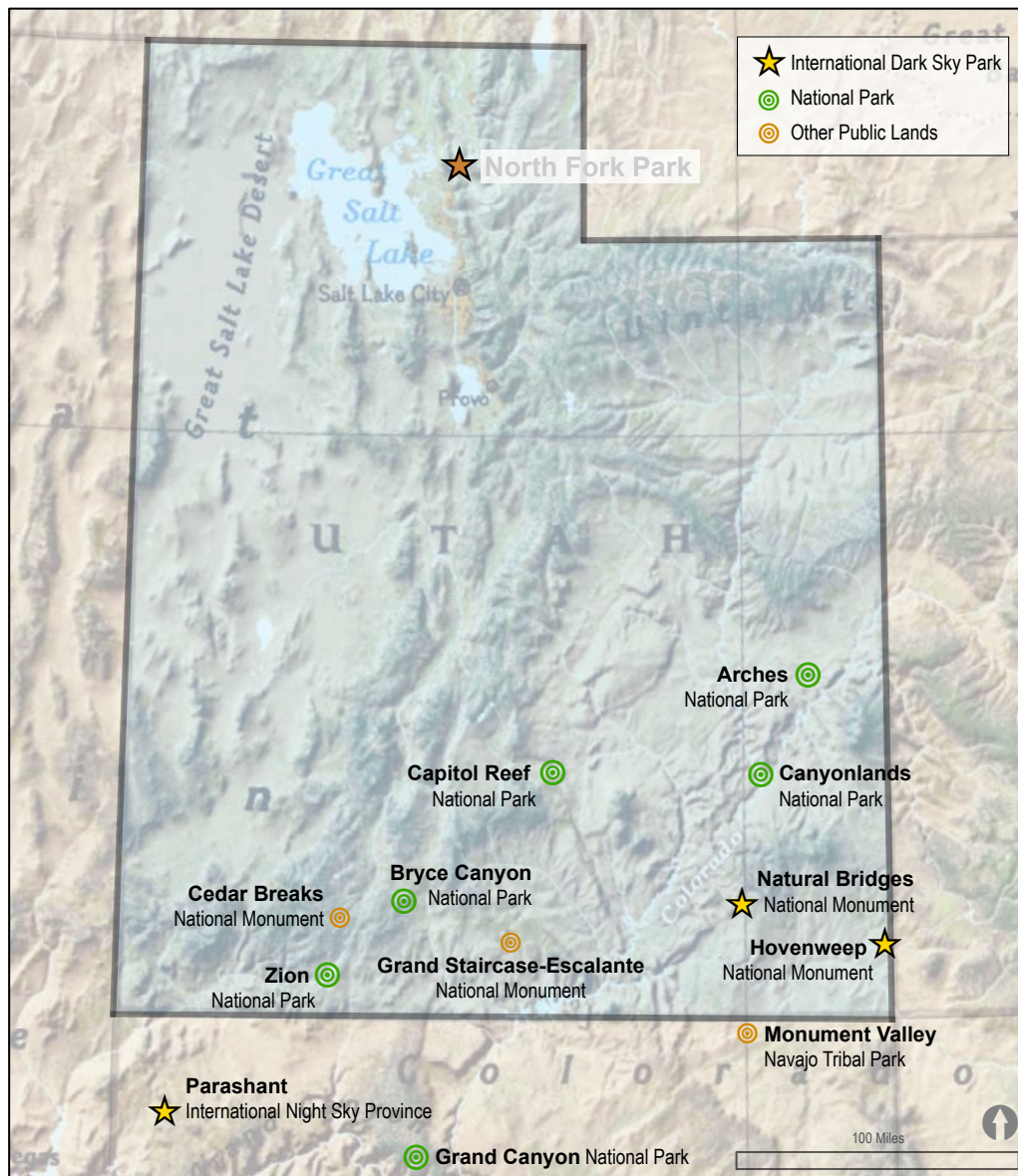
**WEBER STATE UNIVERSITY**  
DEPARTMENT OF GEOGRAPHY

<sup>19</sup> Combined Statistical Area (Salt Lake-Clearfield-Ogden) with 2010 census population of 1,744,888



## North Fork Park

North Fork Park: The Northern Anchor for Largest Global Concentration of Accredited and Aspiring International Dark Sky Parks



Map prepared by Travis Lund and Jeremy Bryson



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## North Fork Park

### Intense Wildlife Focus

North Fork Park is home to many critically important species of Western American wildlife, ranging from the successfully re-introduced mountain goat (right) to the sandhill crane, to the small chorus frog, to the cutthroat trout (state fish of Utah). Local interest in dark skies is driven, in considerable measure, by the desire to protect the healthy presence of Ogden Valley's beloved wildlife.<sup>20</sup>



### Extensive Educational Outreach

North Fork Park is not operated like a national park staffed with rangers; rather, it is a wild and rustic county park with only two seasonal campground hosts. Yet it is so situated that it can offer the dark-sky-deficit residents of the Wasatch Front, ideal, if not always on-site, opportunities for dark sky education where it is most needed: in near-by, highly urbanized, light-polluted areas.

Accordingly, two educational leadership positions have been added (Director and Assistant Director of Dark Sky Education) and an extensive set of educational partnerships (each with a formally designated IDA-liaison) and educational initiatives has been established both in Ogden Valley and on the Wasatch Front.

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<sup>20</sup> The Utah Division of Wildlife Resources, as a Supporter, has provided technical information for this application.

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### Dark Sky Education Partnerships

Director of Dark Sky Education: Jess Dwyer<sup>21</sup>

Assistant Director of Dark Sky Education: Bettymaya Foott<sup>22</sup>

- ▶ *Utah Division of Wildlife Resources* [IDA Liaison: Clint Brunson, Wildlife Recreation Program Specialist (Northern Region)]
- ▶ *Ott Planetarium (Weber State University)* (IDA Liaison: AmyJo Proctor, Associate Director)
- ▶ *Ogden Astronomical Society* (IDA Liaison: Craig Clark Browne, former President)
- ▶ *Swanson's North Fork Park Environmental Center* (Weber County School District) (IDA Liaison: David Jenkins)
- ▶ *Ogden Nature Center* (IDA Liaison: Stefanie Miller)
- ▶ *Wasatch Audubon Society* (IDA Liaison: Lynn Carroll)
- ▶ *HawkWatch International* (IDA Liaison: Jess Dwyer)

### Dark Sky Education Initiatives

Additionally, both broad-based and task-focused initiatives have been established for dark sky research and pilot projects:

- ▶ *Weber State University*
  - Departments of Physics
  - Ott Planetarium
  - Department of Geography
  - Center for Community Engaged Learning
- ▶ *Utah State University* [Huntsman Scholars (Honors) Program]
- ▶ *University of Utah* [Sustainable Campus Initiative]

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<sup>21</sup> Masters of Education, Stanford University Graduate School of Education (2007) (single subject credential: Biology)

<sup>22</sup> Senior Environmental Studies student, University of Utah

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## North Fork Park

### Supporting Educational Events

Star Parties (with IDA-liaison and literature)

- ▶ North Fork Park (Ogden Valley IDA Chapter with Ogden Astronomical Society - annual May or September)
- ▶ Antelope Island (Ott Planetarium/Weber State University with Ogden Astronomical Society - annual April, July, September, October)
- ▶ Monte Cristo (Ogden Astronomical Society - annual June, August)
- ▶ Summer Camps (rotating basis, Ogden Astronomical Society)
- ▶ Summit Series Gathering (Ogden Astronomical Society - irregular July, October - international, non-public)
- ▶ Snowbasin Full Moon Dinner (Ogden Astronomical Society - annual September)
- ▶ Star Crawl (QR code-enabled tour of Ogden Valley viewing various constellations) (TBD)
- ▶ Moonlight Glide Snowshoeing
- ▶ Ogden Nordic (North Fork Park) (three evenings each winter)
- ▶ Owl Prowl (Ogden Nordic in conjunction with DWR) (TBD February 2015)



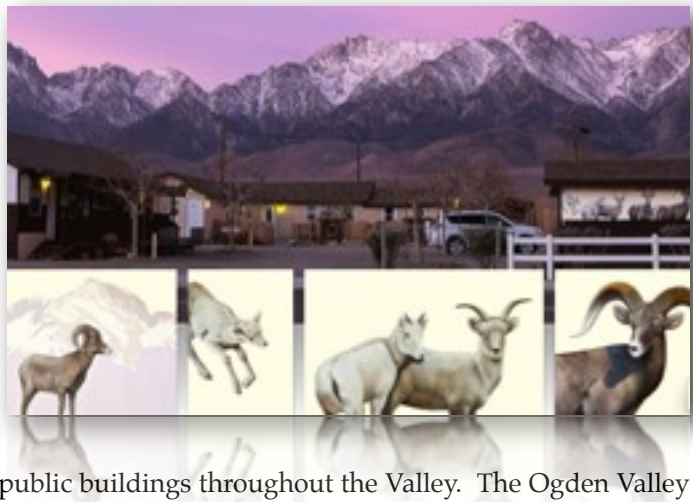
## North Fork Park

### Innovative Public Art

“In my own philanthropy and business endeavors, I have seen the critical role that the arts play in developing vital communities. The arts have a crucial impact on our economy and are an important catalyst for learning, discovery, and achievement in our country.”

– Paul G. Allen, Co-Founder, Microsoft

Working with well-known artist Jane Kim<sup>23</sup> [who has recently completed The Migration Murals (right) at sites across 200 miles of the Eastern Sierra Nevada Mountains and is in-residence at the renowned Cornell University Ornithology Lab], the Ogden Valley IDA Chapter has already begun to raise funds for a dark sky entrance gate (North/Cutler Flats Entrance), park-wide wildlife constellation stencils and, in a



second phase, wildlife constellation murals on public buildings throughout the Valley. The Ogden Valley IDA Chapter plans to employ fully, for North Fork Park as an International Dark Sky Park, the power of public art to build community identification as “dark sky” - an unusual point of distinction, Nominators believe, among the outreach efforts of other parks.

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<sup>23</sup> [[www.ink-dwell.com](http://www.ink-dwell.com)]

## North Fork Park

### Broad Support

The application of North Fork Park for designation as an International Dark Sky Park has secured extraordinarily broad support, reflecting in part, Nominators believe, the well-known stark night-sky-quality contrast between North Fork Park and the nearby, increasingly bright, Wasatch Front.

[\* Letter included in this Application]

#### Nominators

- ▶ Weber County Parks (Jennifer Graham, Director)\*
- ▶ Ogden Valley IDA Chapter Steering Committee (Janet Muir, Frank Cumberland, Steve Clarke with Kimbal Wheatley, GEM)\*

#### Collaborators

- ▶ Weber State University (Charles A. Wight, President)\* / Department of Geography Chair, Bryan Dorsey and Jeremy Bryson, PhD.)\*
- ▶ Ogden Astronomical Society (Craig Clark Browne)\*

#### Supporters

##### State of Utah

- ▶ The Honorable Robert W. Bishop, U.S. House of Representatives\*
- ▶ Governor's Office of Economic Development\*
  - The Honorable Gary R. Herbert, Governor
  - Spencer J. Cox, Lieutenant Governor
  - Spencer P. Eccles, Executive Director
  - Vicki Varela, Managing Director, Utah Office of Tourism
  - David M. Williams, Associate Managing Director
- ▶ Representative Gage Froerer, House District 8, Utah State Legislature\*
- ▶ Utah Division of Wildlife Resources (Justin Dolling, Supervisor, Northern Region)\*

## North Fork Park

### Weber County

- ▶ Commissioner Matthew Bell (Weber County)\*
- ▶ Commissioner Kerry Gibson (Weber County)\*
- ▶ Commissioner Jan Zogmaister (Weber County)\*
- ▶ Pen Hollist, Chair, Ogden Valley Planning Commission\*
- ▶ Executive Director/CEO Sara Toliver, Weber/Ogden Convention & Visitor Bureau\*

### Abbey of Our Lady of the Holy Trinity (Trappist Monastery)

- ▶ Fr. Charles (for the Appointed Superior Fr. Brendan Freeman)\*

### Weber State University

- ▶ President Charles A. Wight\*
- ▶ Professor Stacy Palen (Physics) and Director (Ott Planetarium)\*
- ▶ Professor Jeremy Bryson, Department of Geography\*
- ▶ Jennifer Bodine, Sustainability Specialist\*

### Ogden City

- ▶ Mike Caldwell, Mayor\*

### North Ogden City

- ▶ Brent Taylor, Mayor\*

### Huntsville Town

- ▶ Mayor (Jim Truett) and Town Council\*

## North Fork Park

### Other

- ▶ John Loomis, General Manager, Snowbasin Resort
- ▶ Greg Mauro, Chairman, Summit Mountain Holding Group
- ▶ Jody Smith, Chair, Ogden Valley Land Trust
- ▶ Diane Stern, Chair, Weber Arts Council
- ▶ David Jenkins, Swanson's North Fork Environmental Center
- ▶ Alan Wheelwright, President, Ogden Nordic Ski Resort
- ▶ Weber Pathways, Mark Benigni, Executive Director
- ▶ Jeff Owen, LC (Lighting Certified), Envision Engineering<sup>24</sup>

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<sup>24</sup> Selected contractor for new Salt Lake City Airport terminal \$1.8 billion redevelopment project

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# North Fork Park

## Support Brochure



Broad Base of Support: State, County, Community, and Individual

(in process)	Gage Frazier, Utah State Representative (District 8)	Brent Taylor, Mayor, North Ogden City	John Loomis, General Manager, Snowbasin Resort
<b>Collaborators</b>	Matthew Bell, Commissioner, Weber County	Mayor Jim Truett and Town Council, Huntsville Town	Greg Mauro, Chairman, Summit Mountain Holding Group
• Weber State University (Charles A. Wight, President)	Kerry Gibson, Commissioner, Weber County	Dr. Stacy Palen, Associate Professor, Department of Physics, Weber State University	Craig Clark Browne, President, Ogden Astronomical Society
• Utah Division of Wildlife Resources	Jan Zogmaister, Commissioner, Weber County	The Ott Planetarium Weber State University	Weber Pathways, Mark Benigni, Executive Director
• Ogden Astronomical Society	Sara Toliver, President/CEO, Ogden/Weber Convention & Visitors Bureau	Dr. Jeremy Bryson, Assistant Professor, Department of Geography, Weber State University	Ogden Nordic Ski Resort, Alan Wheelwright, President
<b>Supporters</b>	Jennifer Graham, Director, Weber County Parks and Recreation	Abbey of Our Lady of the Holy Trinity (Trappist Monastery, Huntsville)	Swanson's North Fork Environmental Center (Weber School District), David Jenkins
Governor's Office of Economic Development (The Honorable Gary R. Herbert, Governor; Spencer J. Cox, Lieutenant Governor; Spencer P. Eccles, Executive Director; Vicki Varela, Managing Director; David M. Williams, Assoc. Man. Director)	Utah Division of Wildlife Resources	Diane Stern, Chair, Weber Arts Council	Jeff Owen, LC (Lighting Certified), Envision Engineering
The Honorable Robert W. Bishop, U.S. House of Representatives	Mike Caldwell, Mayor, Ogden City		GEM Chair: Kimbal Wheatley

## Support Letters (selections)

**Rob Bishop, United States Congressman:** "It will be good to see a Northern Utah venue be included in the astro-tourism activity that continues to grow in Southern Utah as opportunities to see the dark skies diminish in the urban areas."

**Governor Gary R. Herbert,** Lieutenant Governor Spencer J. Cox, Executive Director Spencer P. Eccles (Governor's Office of Economic Development), Vicki Varela, Managing Director (Tourism, Film & Global Branding): "Utah's 'Life Elevated' branding has, since 2006, been an attempt to capture visitors' astonishment at, and assessment of, Utah's range of beauty, breadth of recreation and quality of life possibilities. And now, it seems a kind of 'Eyes Elevated' opportunity presents itself; we are pleased to support efforts to accredit North Fork Park as a prestigious International Dark-Sky Park and further solidify Utah's international reputation as a premier dark-sky destination."



## North Fork Park

**Matthew Bell, Weber County Commissioner:** “Weber County is proud to have passed the first local dark-sky laws in the state of Utah (Ogden Valley Lighting and Sign Ordinances) and to be moving into a leadership position with respect to the many advantages of dark-sky lighting: protection of the starry skies, enhanced energy savings, and, importantly, improved security (I spent many years in the Weber County Sheriff’s Office and know this to be true).”<sup>25</sup>

**Gage Froerer, State Representative:** “The park has long been a favored destination for both locals and Wasatch Front neighbors who seek its scenic beauty, recreation opportunities and, yes, the remarkably dark skies that have now been documented by the Weber State University teams.”

**Charles A. Wight, President, Weber State University:** “Weber State University has played a foundational role in the effort to gain accreditation . . . and has joined . . . the Ogden Astronomical Society as application Collaborators.”

**Pen Hollist, Chair, Ogden Valley Planning Commission:** “We particularly welcome the opportunity for activities under the relatively new Agri-Tourism Ordinance to be bolstered by those of astro-tourism, now such a force in Southern Utah. The Park’s dark skies do, indeed, provide a respite from the densely populated and brightly lit Wasatch Front.”

**Mike Caldwell, Mayor of Ogden City:** “North Fork Park is a tremendous asset to our community, and I’m proud to support the application for accreditation of North Fork Park as an International Dark-Sky Park . . . The fact that North Fork Park remains dark amid a highly developed area is remarkable, and we support this effort to recognize the dark-sky quality of its night skies.”

**Jim Truett, Mayor, and the Huntsville Town Council:** “Huntsville has a dark-sky ordinance modeled on that of Weber County (which was the first in the State of Utah), and, just as important, a reasonable record of enforcement. These efforts help to preserve the qualities of an old-fashioned, quintessential American small town, surrounded by farms and ranches while dealing with the pressures of suburban-style and second-home growth.”

**Fr. Charles, Abbey of Our Lady of the Holy Trinity:** “You have a praiseworthy cause in your dark-sky efforts at North Fork Park.”

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<sup>25</sup> North Fork Park administration reports to Commissioner Bell.

### Basics

#### History

The acreage in North Fork Park was purchased from local sheep ranchers, primarily the Ralph Davis family, by the Weber County Watershed Conservation Corporation in the years 1956-1958 as part of a larger effort in the interior West to protect overgrazed watershed and prevent a continuation of the devastating floods that had been experienced.<sup>26</sup> Subsequently, a portion of the land was transferred to Weber County, a portion of which became North Fork Park.



#### Size

- ▶ 2465 acres<sup>27</sup>

#### Jurisdiction

- ▶ Weber County, Utah

#### Public Access

- ▶ Year round: 24/7 entrance and exit by foot, bicycle, horse, snowshoes, cross-country skis.
- ▶ Seasonal (May 1- Nov 1) motorized vehicles: entrance 7am - 10pm, exit 24/7.

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<sup>26</sup> "The Weber County Commission organized the Weber County Watershed Protective Corporation to receive donations from municipal and private corporations to purchase lands along the Ogden-North Ogden portion of the Wasatch Front and in the North Fork of the Ogden River drainage and transfer them to the Forest Service. The corporation was headed by Julian Heppler of the Ogden Kiwanis Club and included such Ogden citizens as businessmen Lorenzo Williamson and W.R. White and Ezra J. Fjeldsted of the Chamber of Commerce." (*The History of the Weber County Watershed Protective Corporation*, Richard C. Roberts and Richard W. Sadler, 1989).

"In his biography of Bernard DeVoto, Wallace Stegner considers it 'surprising' that the Ogden Kiwanis Club rather than some conservation organization should have stood at the forefront of the conservation movement in Utah. From the first flash floods, however, it had been the western townspeople who had suffered most from the overgrazing and deterioration of mountain watersheds. It was their homes and property that paid the ultimate price for this watershed abuse, and it was they who had the most to gain from the conservation movement." (*The History of the Weber County Watershed Protective Corporation*, Richard C. Roberts and Richard W. Sadler, 1989).

<sup>27</sup> No private in-holdings; several access easements to bordering private land.

## North Fork Park

### Camping (May 1 - November 1)

- ▶ 132 individual campsites (north, south and east perimeters)
- ▶ Seven large group campsites with covered boweries

### Ogden Nordic (Winter)

- ▶ Not-for-profit contractor (all-volunteer with one paid staff member)
- ▶ Cross-country skiing and snowshoeing with yurt check-in and equipment rental
- ▶ More than 12 miles of groomed, winter-use trails
- ▶ Full-moon snowshoeing 3x/season



### Swanson's North Fork Park Environmental Center (year-round)

- ▶ Leased non-public portion of North Fork Park by Weber County School District
- ▶ Used by 9,000-12,000 students/year



### Special Events

- ▶ Two weekends each summer, light towers are employed for public safety in the group campground area (example: Roots and Blues Festiva

### Dark Sky Designation

- ▶ A site near the Old Shooting Range is to be designated a Dark Sky Viewing Area
- ▶ An existing trail may be designated as a Dark Sky Trail

### North Fork Park Management Plan (excerpts)

#### Mission

"North Fork Park is a four season rustic park that strives to provide the public with recreation and relaxation opportunities while still preserving the park's peaceful, serene environment and vital natural resources, including for future generations."



## North Fork Park

“To help the Parks management and staff stay focused on this mission statement, operational philosophies will be reiterated and practiced. They are:

1. Exercise thoughtful planning – appropriately modernize while maintaining the integrity of wilderness surroundings, keeping the park the most undisturbed park in the county.
2. Incorporate a mindset of separation of activities or collaboration of activities, depending on the wisest approach – day use vs. overnight use, coordinating the combination or separation of hiking, biking, horseback riding, fishing, etc.
3. Remain environmentally conscious – wise execution of planning to preserve watersheds, wildlife habitat, dark skies (emphasis added), and plant environments, be certain to consider these things in development and usage patterns.
4. Educate users on efforts they can take to help with wise stewardship of the park – trail etiquette, trail closures, fire safety / restrictions, etc.”

### Current Projects (excerpt)

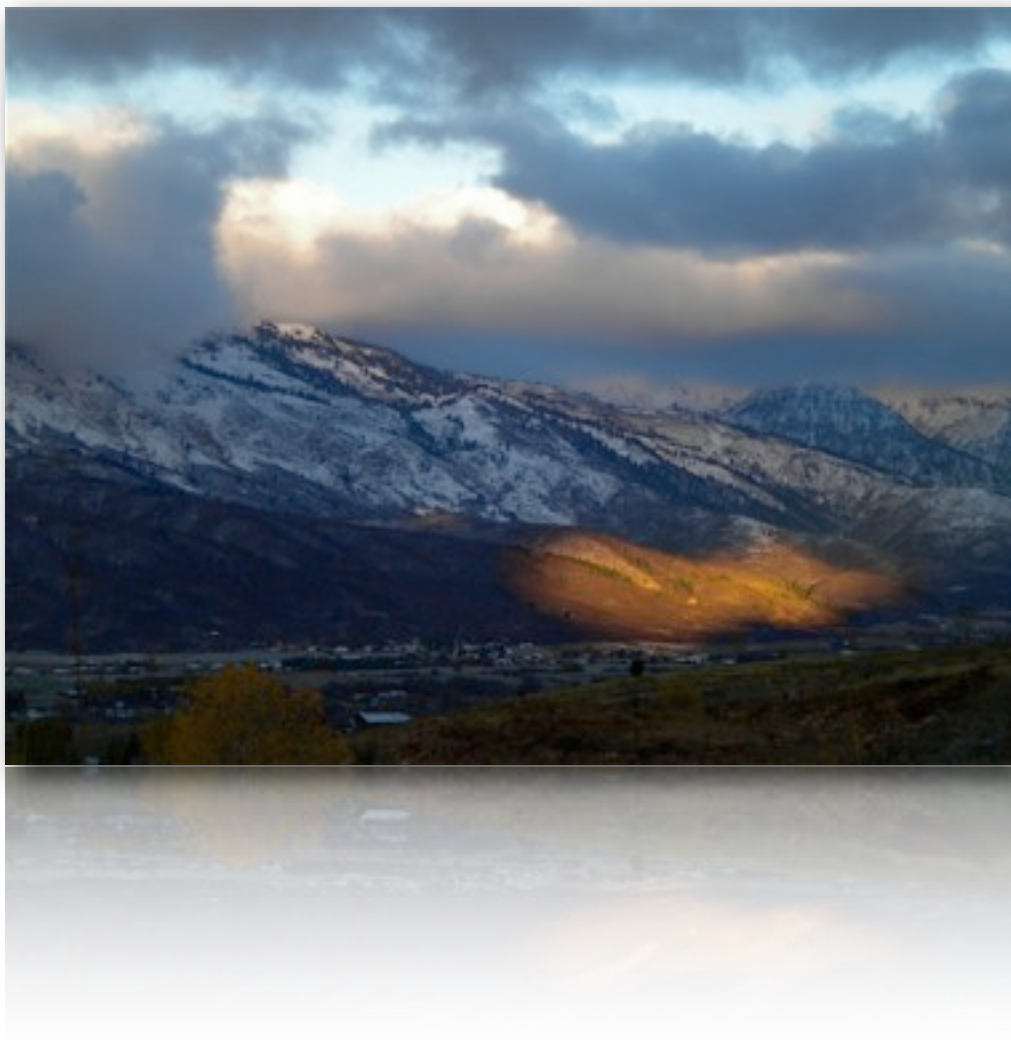
“International Dark-Sky Park Accreditation – Application completion and accreditation approval is expected in 2015. Accreditation will make North Fork Park only the second county-operated International Dark-Sky Park in the United States. Designated viewing areas are slated to be set at the Old Shooting Range and possibly one other location. Mule Ear Trail will be designated as a Dark-Sky Trail. Signage and possibly a monument will be part of the completed designation. A privately funded dark-sky public arts program is under discussion. Dark-sky events, especially those focused on wildlife, are planned with, among others, the Utah Division of Wildlife Resources and the Ogden Astronomical Society.”

## North Fork Park

“All exterior lighting in the Park, including that of Contractors and Lessees, shall be in accordance with the IDA/RASC Guide to Outdoor Lighting (adopted in its entirety and incorporated by reference).”

Confirmed: Jennifer Graham, Director, Weber County Parks

Ogden Valley: Looking toward North Fork Park on an early Winter morning

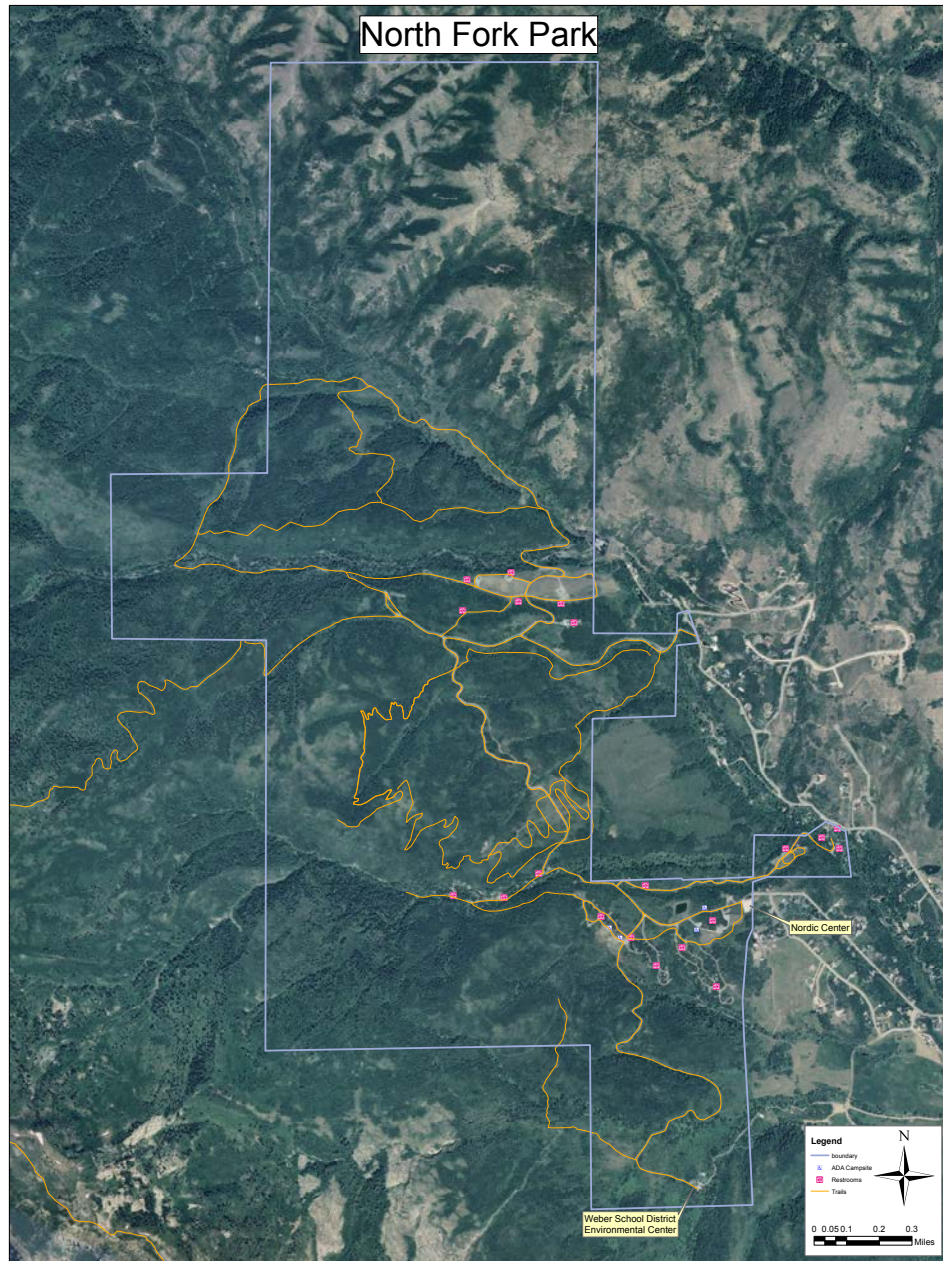


## North Fork Park

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### North Fork Park: Park Boundaries and Location Lessee<sup>28</sup> and Contractor<sup>29</sup>

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<sup>28</sup> Swanson's North Fork Park Environmental Center

<sup>29</sup> Ogden Nordic ski facility

## North Fork Park: Dark Sky Core Area





# Dark Sky Quality

## SQM Measurements (sample average: 20.94)

With five Unihedron devices donated by Weber State University, two student teams [one in Fall 2013, the other in Fall 2014, both under the direction of Department of Geography Professor Jeremy Bryson and with representatives of the Ogden Valley IDA Chapter] went to North Fork Park on new-moon nights to take multiple readings which yielded exceptional results:

North Fork Park		Unihedron Sky Quality Measurements October 5, 2013 / September 24, 2014					
Sample Name / Year	GPS Coordinates	SQM <sub>AVG</sub>	SQM <sub>1</sub>	SQM <sub>2</sub>	SQM <sub>3</sub>	SQM <sub>4</sub>	SQM <sub>5</sub>
Ben Lomond Trailhead / 2013	41.38312, -111.92058	20.93	21.12	20.87	20.91	20.88	
Bicentennial Bowery / 2014	41.38480, -111.92308	20.83	20.77	20.87	20.83	20.84	20.82
Cold Water Intersection / 2014	41.37250, -111.91388	20.91	20.90	20.88	20.91	20.91	20.96
Cold Water Rd / 2013	41.37138, -111.91642	20.94	20.95	20.92	20.97	20.90	
Corrals West / 2014	41.36945, -111.90935	20.92	20.90	20.94	20.90	20.95	20.92
Cutler East / 2014	41.38610, -111.91113	20.91	20.98	20.93	20.86	20.89	20.88
Cutler West / 2014	41.38587, -111.92090	20.96	20.95	20.99	20.89	20.97	21.00
Dark Sky Viewing Entrance / 2014	41.37529, -111.91298	20.84	20.84	20.89	20.84	20.83	20.82
Dark Sky Viewing Area / 2014	41.37447, -111.91503	21.06	20.94	21.39	21.00	20.94	21.05
East Bowery / 2014	41.38512, -111.91278	20.95	21.00	20.98	20.97	20.89	20.89
Middle Gate / 2013	41.37488, -111.89703	20.98	20.91	21.01	21.08	20.92	20.98
Middle Gate / 2014	41.37467, -111.89707	20.93	20.89	20.89	20.93	20.95	20.97
Middle Gate Intersection / 2014	41.37194, -111.90947	20.85	20.80	20.83	20.87	20.89	20.88
Mule Ear Trail North / 2013	41.38073, -111.91955	20.93	21.01	20.93	20.91	20.88	
Mule Ear Trail South / 2013	41.37348, -111.91377	21.23	21.50	21.27	21.17	20.97	
Mule Ear Trailhead South / 2014	41.37366, -111.91310	20.90	20.88	20.89	20.88	20.98	20.86
Mule Shoe Trailhead South / 2013	41.37378, -111.91280	20.94	21.05	20.85	20.93	20.93	
Mustang Flats / 2013	41.37282, -111.89965	20.98	21.00	21.03	20.96	20.92	20.99
Mustang Flats / 2014	41.37313, -111.89988	20.91	21.06	20.88	20.86	20.89	20.87
New Trail Central 1 / 2014	41.37462, -111.91625	20.96	20.92	20.93	20.91	21.03	21.01
New Trail Central 2 / 2014	41.37580, -111.91625	21.00	21.01	21.01	21.03	21.02	20.92
New Trail South 1 / 2014	41.37423, -111.91464	20.92	20.97	20.97	20.87	20.89	20.90
New Trail South 2 / 2014	41.37423, -111.91462	20.85	20.61	20.93	20.88	20.88	20.93
New Trail South 3 / 2014	41.37384, -111.91438	20.90	20.88	20.83	21.00	20.88	20.90
North Fork Park Rd / 2014	41.37827, -111.91722	20.91	20.89	20.91	20.91	20.91	20.93
North Fork Rd / 2014	41.37725, -111.90096	21.04	21.47	20.99	20.95	20.87	20.90
North Gate / 2013	41.38313, -111.90527	20.97	20.94	21.01	20.98	20.95	20.97
North Gate Rd East / 2014	41.38233, -111.90715	20.91	20.92	20.93	20.87	20.93	20.92
North Gate Rd West / 2014	41.38177, -111.91216	20.91	20.87	20.88	20.91	20.92	20.98
River Trail / 2014	41.38915, -111.91440	20.92	20.95	20.82	20.99	21.00	20.86
South Gate / 2013	41.37103, -111.90230	20.97	21.10	20.84	20.77	21.16	
South Gate / 2014	41.37117, -111.90222	20.93	20.89	20.90	20.91	20.96	20.98
Trailhead Parking / 2013	41.38105, -111.91822	20.90	20.82	20.80	20.89	21.10	
Trailhead Parking / 2014	41.38072, -111.91859	20.95	20.94	20.98	20.89	20.89	21.05
View Bowery / 2013	41.38358, -111.91307	20.80	20.92	20.93	20.93	20.40	
View Bowery / 2014	41.38355, -111.91255	20.82	20.88	20.83	20.83	20.82	20.76
Waterfall Trailhead / 2013	41.37157, -111.92165	21.19	21.60	21.04	21.17	20.95	
Waterfall Trailhead / 2014	41.37138, -111.92113	21.04	20.88	21.04	20.94	21.39	20.96
West Bowery / 2013	41.38492, -111.91710	20.75	21.00	20.97	20.86	20.01	20.92
West Bowery / 2014	41.38580, -111.91837	21.11	21.13	21.12	21.14	21.08	21.08
North Fork Park (40 Samples) SQM <sub>AVG</sub>		20.94	 <b>WEBER STATE UNIVERSITY</b> <small>DEPARTMENT OF GEOGRAPHY</small>				



## North Fork Park

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Photograph September 24, 2014 taken at proposed Dark Sky Viewing Area<sup>30</sup>

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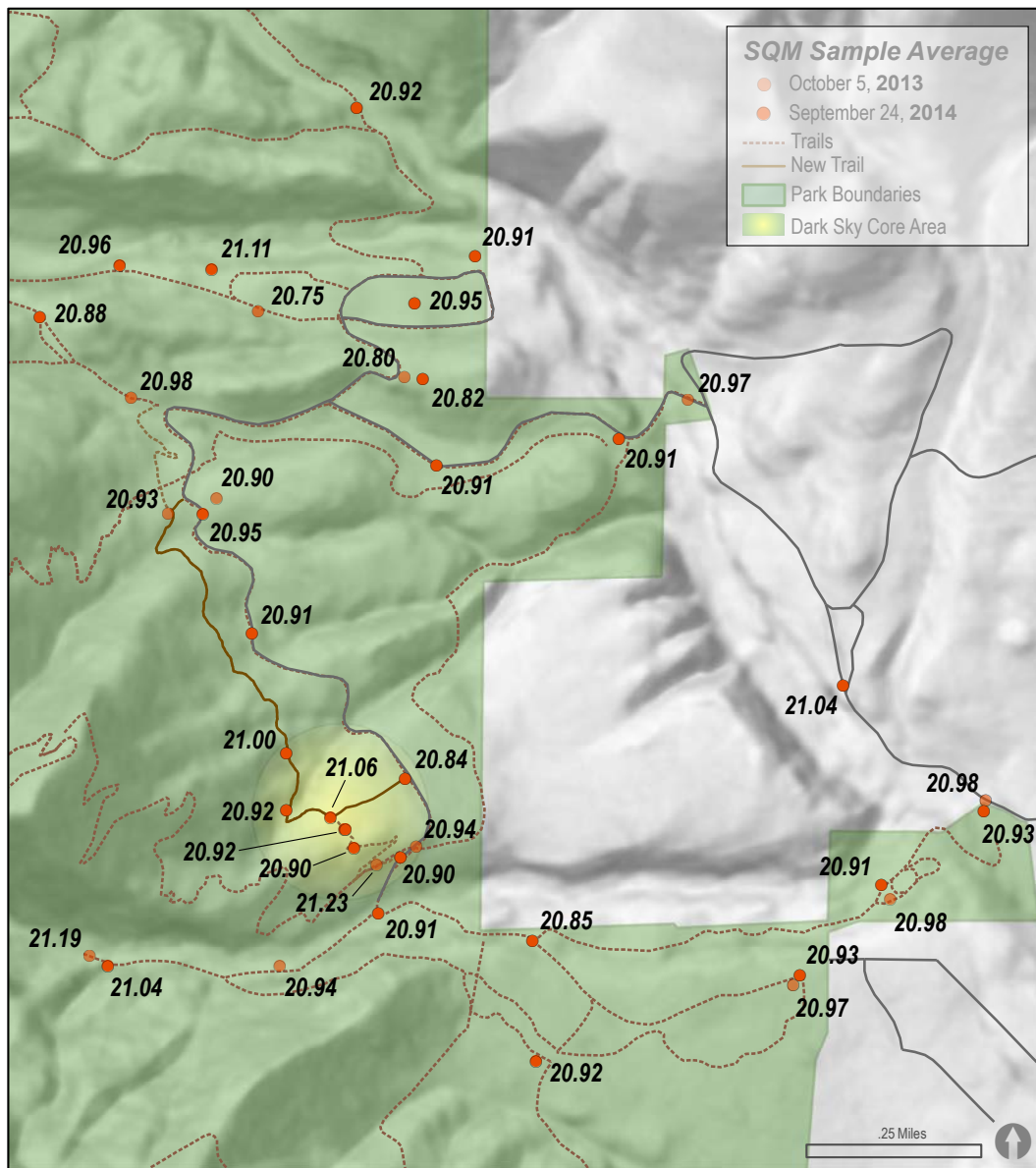
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<sup>30</sup>Near the Old Shooting Range. *Photograph: Casey Grimley* - settings: 11mm @f/2.8, 25 seconds, ISO 3200

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## North Fork Park

### SQM Sample Averages (2013 and 2014)



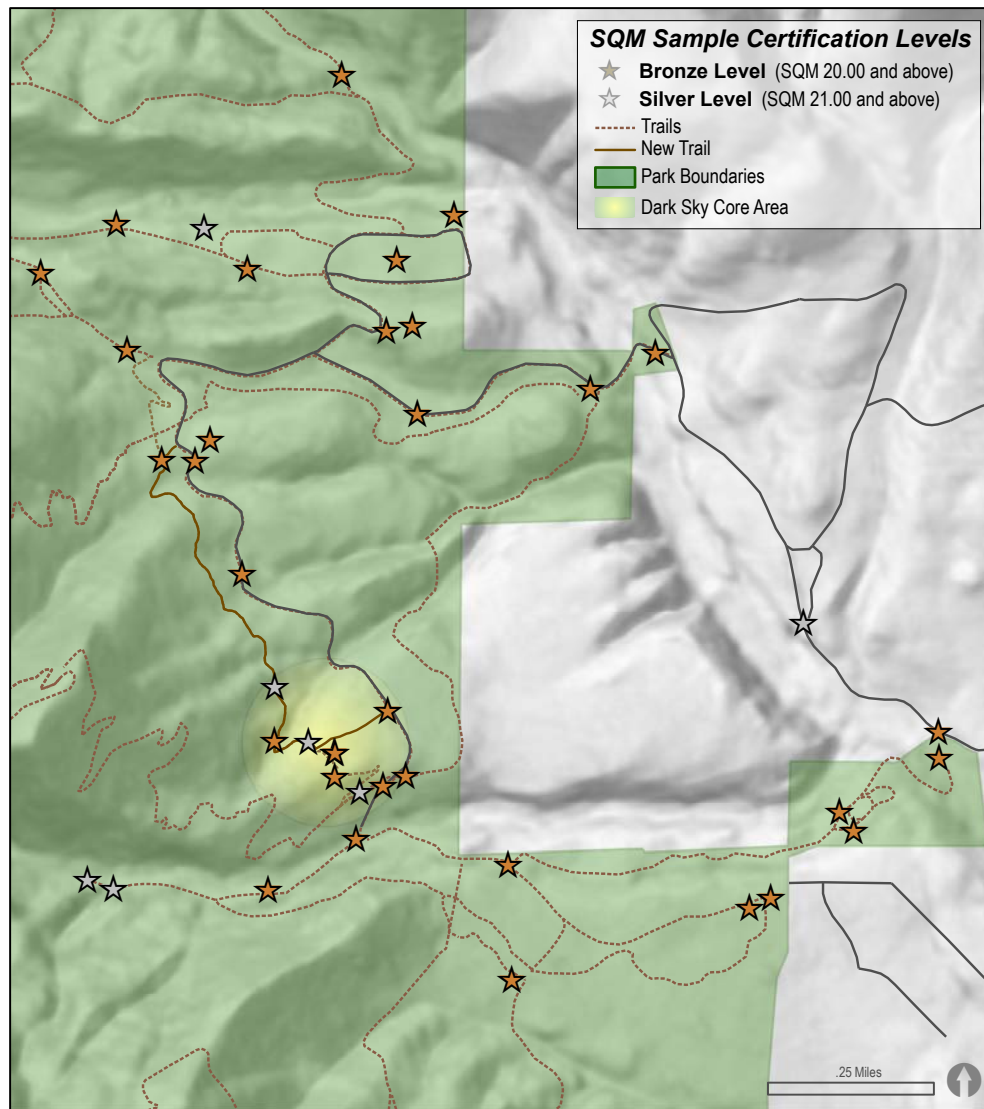
Map prepared by Travis Lund and Jeremy Bryson



**WEBER STATE UNIVERSITY**  
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## North Fork Park

### SQM Sample Averages: Silver and Bronze Tier Reading Locations (2013 and 2014)



Map prepared by Travis Lund and Jeremy Bryson



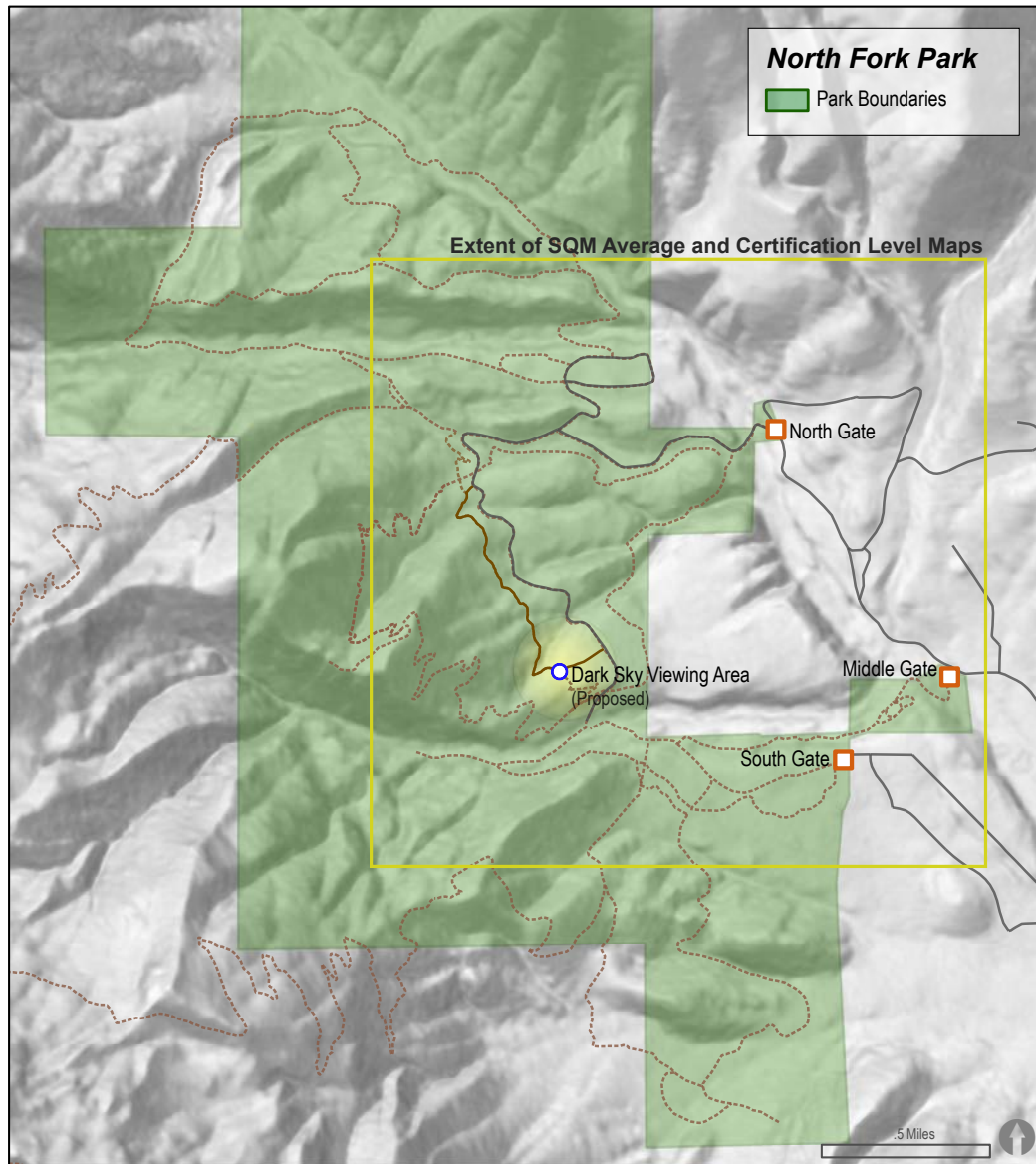
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## North Fork Park

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### North Fork Park: SQM-Measured Area (2013 and 2014)

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Map prepared by Travis Lund and Jeremy Bryson



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## North Fork Park



September 24, 2014: Weber State University Department of Geography team gathers to celebrate North Fork Park's night sky readings and the magnificence of the Milky Way.<sup>31</sup>

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<sup>31</sup> Photograph: Casey Grimley - settings: 11mm @f/2.8, 25 seconds, ISO 3200

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## North Fork Park

### Selected Student Reactions (2014 Weber State University Team)

**Sam Stout:** "I have never seen the night sky as beautiful and majestic as it was last night. I feel that for me, the night sky represents a personal and intimate relationship that we each have with the world. I feel that the sky last night was meant just for me, and it gives me a perspective that I can make a difference."

**Eliza Lyons:** "The night sky is a window to enlightenment, to something much larger than all of us, something we must discover if we wish to achieve inner peace and happiness."

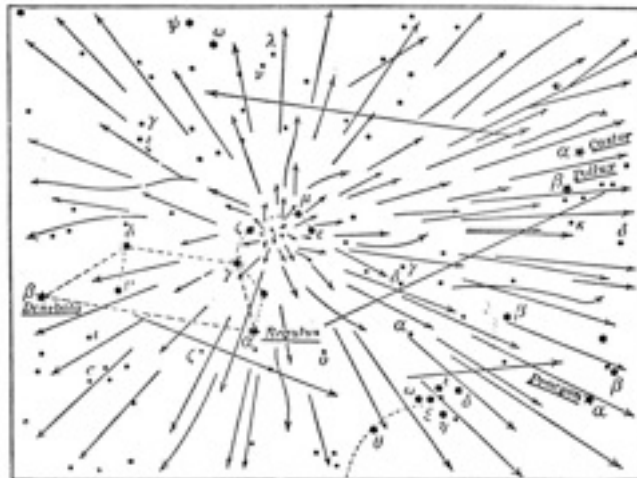
**Devin Grigsby:** "I saw two shooting stars and the Milky Way, and it made me ecstatic. I am a person who hasn't spent very much time outside a city, so I don't take the night sky's beauty for granted. The dark sky preservation efforts in Ogden Valley are keeping experiences like mine possible for generations to come and that is what was most exciting to me. I learned that we have a growing disconnect with our dark night skies and in order to protect and preserve them we must have people re-engage with the skies and teach them how to protect those skies. That is what this night was all about."

**Vincent Hanson:** "I'm from Massachusetts where we don't have many opportunities to view dark skies like we do here in Utah. I'm really glad that people are taking steps to preserve areas like North Fork Park so that future generations will be able to enjoy the night sky."

**Antonya Begay:** "I can't honestly say I had an entirely new or different experience, but the proximity to an urban city was a different perception than I am familiar with. I am used to being under the dark sky especially on the Navajo Reservation, completely removed from modern society and light pollution. (Wonderful to see) the galaxy Andromeda and constellation Pleiades. "

**Travis Lund:** "For me, last night was my first exposure to the North Fork Park area, although I've lived in Ogden for the last few years, and I wish I had understood the beauty of the park."

**Dennis Wu:** "This trip has changed the way I see the night sky."



## North Fork Park

### Lighting Inventory

Full lighting inventory includes lighting at three entities: North Fork Park; contractor Ogden Nordic; and lessee Swanson's North Fork Park Environmental Center

NORTH FORK PARK	OGDEN NORDIC	ENVIRONMENTAL CENTER
2-double floodlight fixtures  (seasonal and shielded)	1- exterior porch light  (Lowe's Portfolio IDA-certified fixture)	2-wall packs (shielded)
		6-double floodlight fixtures (shielded)
		7-ornamental lights under deep (30 inches at the minimum) overhang (opaque glass, 450-lumens, 3100 K)

### Lightscape Management Plan

All eighteen (18) light fixtures of the Lighting Inventory, above, were brought into compliance during the accreditation application process. With remediated current lighting and a policy adopting IDA/RASC standards for all future lighting, North Fork Park's Lightscape Management Plan may be one of the simplest in the IDA system.

"All exterior lighting in the Park, including that of Contractors and Lessees, shall be in accordance with the IDA/RASC Guide to Outdoor Lighting (adopted in its entirety and incorporated by reference)."

[Weber County North Fork Park Management Plan]

- Confirmation: Jennifer Graham, Director, Weber County Parks

Swanson's North Fork Environmental Center



Ogden Nordic Ski Facility



## North Fork Park

### BEFORE REMEDIATION

### AFTER REMEDIATION

#### Seasonal Campground Host Campsites (2)



#### Swanson's North Fork Park Environmental Center



## North Fork Park

### BEFORE REMEDIATION

### AFTER REMEDIATION

[Reduced lumens (450) carriage lights under overhang, 3100-K]



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## Ogden Nordic Yurt



## Issue Leadership

### Local

The Ogden Valley IDA Chapter was founded as a part of the Ogden Valley GEM (Growth with Excellence Mandate) Committee<sup>33</sup>, a citizen group that, for over a decade, has assisted residents, Weber County Planning Division and Weber County Commission with perspective and data about Ogden Valley, growth pressure and quality of community issues.

Utah's first dark sky ordinance<sup>34</sup> resulted from GEM Committee work with Weber County in 2007. Concern over the lack of enforcement of this ordinance led to a survey of commercial signage completed in December 2012, confirming many instances of non-compliance (A-Supporting Document).

In Spring 2013 the newly formed Ogden Valley IDA Chapter undertook a series of meetings with local businesses seeking voluntary compliance with both the lighting and signage ordinances, resulting in growing awareness and a significant number of improvements and remediations:

- ▶ Elkridge Engineering (under-canopy lights wattage dimmed)
- ▶ Iverson Dental (internally-illuminated sign turned off at regular time each night)
- ▶ Moose Hollow HOA (wattage dimmed in atria)
- ▶ Snowberry Inn (shields added to sign floodlights)
- ▶ Summit Welcome Center (atrium lights turned off just after closing)
- ▶ St. Florence Church (replaced 18-inch pole-mounted globe lights with fully shielded fixtures)
- ▶ Snowcrest Junior High (exempt LED sign hours seasonal and curfewed)
- ▶ Valley Elementary School (exempt LED sign hours seasonal and curfewed)

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<sup>33</sup>[Short GEM video](#) offers an excellent introduction to Ogden Valley. [Ogden Valley GEM](#)

<sup>34</sup> [[http://www.co.weber.ut.us/mediawiki/index.php/Ogden\\_Valley\\_Lighting](http://www.co.weber.ut.us/mediawiki/index.php/Ogden_Valley_Lighting)]



## North Fork Park

- ▶ WorldMark by Wyndham at Wolf Creek (working with electrical contractor for phased exterior lighting remediation through several budget seasons)<sup>35</sup>

In preparation for those meetings,, the Ogden Valley Starry Nights program was launched not only to help local businesses weather the shoulder seasons with dark sky activities (the Star Menu at Carlos & Harley's restaurant is an early example) but also to increase public awareness of the dark sky initiative.

### 2013 business award winner



ogden valley starry nights!

[www.starrynightsutah.org](http://www.starrynightsutah.org)

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<sup>35</sup> 2014 Wyndham Resorts/Wolf Creek report: "Support Starry Night lighting. Wyndham has budgeted a phased replacement of the lighting throughout the resort."

## North Fork Park

### County

Following establishment of the Ogden Valley Starry Nights initiative, the Ogden Valley IDA Chapter began to consider other avenues for responsible economic development and, noting the dark sky history of The Headlands IDSP, focused on the dark sky attributes of North Fork Park.

*Weber State University* (Department of Geography students under Professor Jeremy Bryson) with a representative of the Ogden Valley IDA Chapter undertook the initial dark sky readings at the Park in October 2013. A series of presentations to the *Weber County Commissioners* followed and resulted in individual letters of support from all Commissioners.



In cooperation with *Summit Mountain Holdings Group* (Greg Mauro, Chairman) and Weber County Planning Division, the Ogden Valley IDA Chapter is assisting in the dark sky plans for Powder Mountain, Summit/Eden Village, and, especially, in helping to ensure that the lighting for a proposed boutique hotel in the mid-mountain area on the Sundown Saddle will be highly sensitive to issues of impact on North Fork Park. Innovative, low-glare night skiing lighting is being installed. Further, the Ogden Valley IDA Chapter will work with Summit on its own accreditation of the resort as a Dark Sky Development of Distinction.



### State and Regional

*Weber State University*

Professor Jeremy Bryson (Geography) led a Spring 2014 team analyzing the lighting and signage ordinances in “Amenity West” communities, resulting in a paper that was presented at the 2014 conference of the Utah Academy of Science, Arts, and Letters (April 11, 2014 at Dixie State University in St. George, Utah) (B-Supporting Document). The Department of Geography has also committed to continued annual dark sky monitoring at North Fork Park.

Conversations with Weber State University’s Facility Management regarding becoming a beta applicant for an IDA Urban Star Park were initiated in May 2014 (status: stalled pending further investigation blue spectrum issues).

## North Fork Park

### *Utah State University (Logan)*

Professor Christine Arrington (Huntsman Business School), who is also Co-Director of the Huntsman Scholar Program, provided a dark sky team Spring Semester 2014 to propose lighting and signage language for tightened ordinances in Ogden Valley.



### *Salt Lake International Airport (terminal re-development plan)*

GEM Committee member and Ogden Valley resident Jeff Owens is a principal of Envision Engineering, recently awarded the lighting contract for large-scale terminal re-development plant at Salt Lake International Airport (target completion date 2025). He reports: "Dark Skies at the airport is a very big issue. It's not so much about Dark Skies to see the stars as much as it is about keeping light out of the pilot's eyes and the control tower. Regardless of the purpose, using light fixtures that have a low BUG rating is critical." Jeff has been helpful to the Ogden Valley IDA Chapter and volunteered to provide lighting engineering expertise.



### *Escalante, Utah*

The scenic town of Escalante, Utah (near Grand Staircase-Escalante National Monument) was considering street lighting with brightness equal to Salt Lake City levels. As alerted by Colorado Plateau IDA Chapter, the Ogden Valley IDA Chapter sent (through an intermediary) its website with a wealth of IDA and other dark sky links. The town then implemented dark sky friendly lighting (see photograph, right); the Ogden Valley IDA Chapter believes the information it provided helped support that decision.



### *Ivins, Utah*

Mike Scott (St. George Astronomical Society and Ivins City Planning) is awaiting model ordinances from Ogden Valley / Weber County for possible adoption in Ivins, another small scenic town in Utah with enviable, but at-risk, dark skies.

## North Fork Park

### *Colorado Plateau Dark Sky Cooperative*

The Ogden Valley IDA Chapter and the Colorado Plateau Dark Sky Cooperative have agreed to coordinate, as much as possible, dark sky education efforts. Arrangements in first-conversation-stage only, but follow-on collaboration is expected to help further link northern and southern Utah dark sky initiatives.



## Public Education and Outreach

### **Development of Dark Sky Education Material**

Over the next two years, AmyJo Proctor (Associate Director of the Ott Planetarium at Weber State University), Jess Dwyer (Ogden Valley IDA Chapter Director of Dark Sky Education), and Janet Muir, (Ogden Valley IDA Chapter), will work to adapt IDA material (making specifically referential to North Fork Park) for online use and event hard-copy distribution in the Park, Ogden Valley and on the Wasatch Front.

### **Partnerships for Dark Sky Education**

*Utah State Division of Wildlife Resources (DWR) (Northern Region)*

Clint Brunson, Wildlife Recreation Program Specialist (Northern Region), is the IDA-liaison. Working with the Ogden Valley IDA Chapter, the following DWR events are under discussion:

- ▶ Owl Prowl (tentatively scheduled February 2015 on snowshoe)
- ▶ The Sounds of Night: Wildlife at North Fork Park (and elsewhere)
- ▶ Wildlife Twilight Tours
- ▶ Use Your Ears, Not Your Eyes Wildlife Walk
- ▶ Nighttime Nature Safari
- ▶ Nocturnal Nature Exploration
- ▶ Nighttime Wildlife Wonders
- ▶ Go Wild at Night!
- ▶ Toad Road
- ▶ Bats and Rats: In the Dark
- ▶ Tundra Swans and Their Nighttime Secrets



## North Fork Park

### *Swanson's North Fork Environmental Center (Weber County Schools)*

Established in 1976 and located on a small leased section of North Fork Park, the Environmental Center hosts 9,000-12,000 Weber County school children (4<sup>th</sup> grade and older) each year for both daytime and overnight visits. David Jenkins, IDA liaison, has developed a model solar system and has, himself, retrofitted the lighting at the facility to become IDA compliant.



### *Ott Planetarium (Weber State University)*

See Development of Dark Sky Education Material, above.



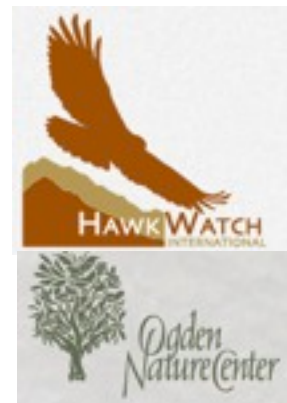
### *Wasatch Audubon Society*

Wasatch Audubon Society has conducted a baseline bird inventory at North Fork Park and, with member IDA-liaison Lynn Carroll, will introduce dark sky materials into regular and special events.



### *HawkWatch International*

Jess Dwyer (HawkWatch member and Ogden Valley IDA Chapter Director of Dark Sky Education) will coordinate events.



### *Ogden Nature Center*

Stefanie Miller will help introduce dark sky education into existing programs. The Ogden Nature Center regularly held star parties until the Wasatch Front became too light-polluted.

### *Ogden Astronomical Society*

The Ogden Astronomical Society is the premier organizer of star parties and astronomy education in Utah north of Salt Lake City. On an annual basis, it hosts close to 30 star parties. Craig Clark Browne, former President, is the new IDA liaison.





## North Fork Park

### Events

#### Star Parties (with IDA-liaison and literature)

- ▶ North Fork Park (Ogden Valley IDA Chapter with Ogden Astronomical Society - *annual May or September*)
- ▶ Antelope Island (Ott Planetarium/Weber State University with Ogden Astronomical Society - *annual April, September, October*)
- ▶ Monte Cristo (Ogden Astronomical Society - *annual June, August*)
- ▶ Summer Camps (Ogden Astronomical Society)
- ▶ Summit Series Gathering (Ogden Astronomical Society - *irregular July* - international, non-public)
- ▶ Snowbasin Full Moon Dinner (Ogden Astronomical Society - *annual September*)

#### Winter Wildlife Wander

- ▶ With Utah Division of Wildlife Resources (*annual - February or March*)

#### Moonlight Glide Snowshoeing

- ▶ Ogden Nordic (North Fork Park) (*three full-moon evenings annually*)



## North Fork Park

### Media Coverage

[See E2-Supporting Documents for digital text and clippings]

#### Standard Examiner

*Residents Worry About Planned Nordic Valley Condos, December 6, 2014*

*Eagle Mountain Eyes Rules to Protect Night Skies, View of Stars, October 14, 2014*

*North Fork Park a Dark Sky Destination, May 15, 2014*

#### Ogden Valley News

*Eden Post Office Goes Dark-Sky, February (TBD), 2015*

*Good-Neighbor and Kind-to-Wildlife Outdoor Lighting, December 15, 2014*

*WSU Teams Measure Dark Sky in Park Accreditation Effort, October 15, 2014*

*Meeting on Future Development of Wolf Creek Well Attended [citizen feedback: "Dark Sky Standards should be enforced throughout the Valley]", October 1, 2014*

*Eden Fire Station Goes "Dark-Sky," September 15, 2014*

*Anticipation Grows Over Dark Sky Accreditation in North Fork Park, August 15, 2014*

*Support and Momentum Grow for North Fork Park Designation, July 1, 2014*

*WSU Leads Effort to Designate "Dark-Sky" Park, June 1, 2014*

*Ogden Valley Starry Nights, Weber County Parks & Recreation, and Ogden Astronomical Society Host Star Party at North Fork Park, May 15, 2014*

*May 23 Star Party to Launch North Fork Park Accreditation Effort, May 1, 2014*

*The Amazing Raise Featured Non-Profit: Ogden Valley Starry Nights, August 15, 2013*

*Family Stargazing in Eden Park: Ogden Valley Starry Nights Star Party a Success!, May 15, 2013*

*Ogden Valley GEM Committee to Host Star Party at Eden Park on May 10, April 15, 2013*

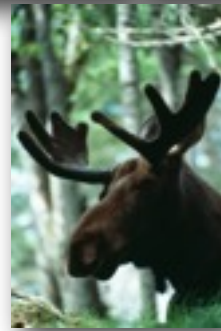
*International Dark Sky Week, April 15-11, 2013, March 1, 2013*

### Wildlife

Utah Division of Wildlife Resources (DWR) assisted in compiling the following partial list of Park wildlife. The presence (both seen and unseen), health and welfare of local wildlife is a major focus of Valley residents.<sup>36</sup> The Ogden Valley IDA Chapter considers it *the* prime topic for dark sky education.

#### Larger Mammals

- ▶ American Black Bear
- ▶ Bobcat
- ▶ Coyote
- ▶ Elk
- ▶ Moose (Shiras)
- ▶ Mountain Goat
- ▶ Mule Deer



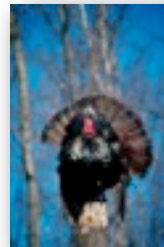
#### Smaller Mammals

- ▶ Leporidae (including Snowshoe Hare, Cottontail Rabbit)
- ▶ Rodents (15-25 species, including Porcupine, Flying Squirrel, Jumping Mouse, Wood Rat)
- ▶ Bats (five-eight species, including Big Brown Bat, Hoary Bat)
- ▶ Shrews (four species, including Montane Shrew)



#### Birds (compiled with the additional assistance of the Wasatch Audubon Society)

- ▶ Golden Eagle
- ▶ Sandhill Crane
- ▶ Wild Turkey
- ▶ Dusky and Ruffed Grouse



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<sup>36</sup> Ogden Valley General Plan (Weber County, 1998): Sensitive Lands/Wildlife Habitat [[http://www.co.weber.ut.us/mediawiki/index.php/Ogden\\_Valley\\_General\\_Plan#4.03\\_Wildlife\\_Habitat](http://www.co.weber.ut.us/mediawiki/index.php/Ogden_Valley_General_Plan#4.03_Wildlife_Habitat)]

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## North Fork Park

- ▶ Owls (six species, including Great Horned, Western Screech, Northern Saw-Whet, Flammulated)
- ▶ Raptors (including Northern Goshawk, American Kestrel, Red-tailed Hawk, Swainson's Hawk, Rough-legged Hawk)
- ▶ Woodpeckers and Sapsuckers [seven species, including Lewis's (Utah Sensitive Species), American Three-toed (Utah Sensitive Species), Downy and Hairy Woodpeckers; Northern Flicker; Red-naped Sapsucker]
- ▶ Songbirds (60+ species, including Warbling Vireo, Black-capped Chickadee, Mountain Bluebird, Townsend's Solitaire, Orange-crowned Warbler, MacGillivray's Warbler)
- ▶ Hummingbirds (three species, including Black-chinned, Broad-tailed)

Fish [three species, including Bonneville Cutthroat Trout (Utah Sensitive Species)]

Amphibians [four species: Western (Boreal) Toad, Chorus Frog, Tiger Salamander, Leopard Frog]

Reptiles (four - five species snakes and lizards)

Native Mollusks (four - five species possible based on range, but no surveys have been completed)



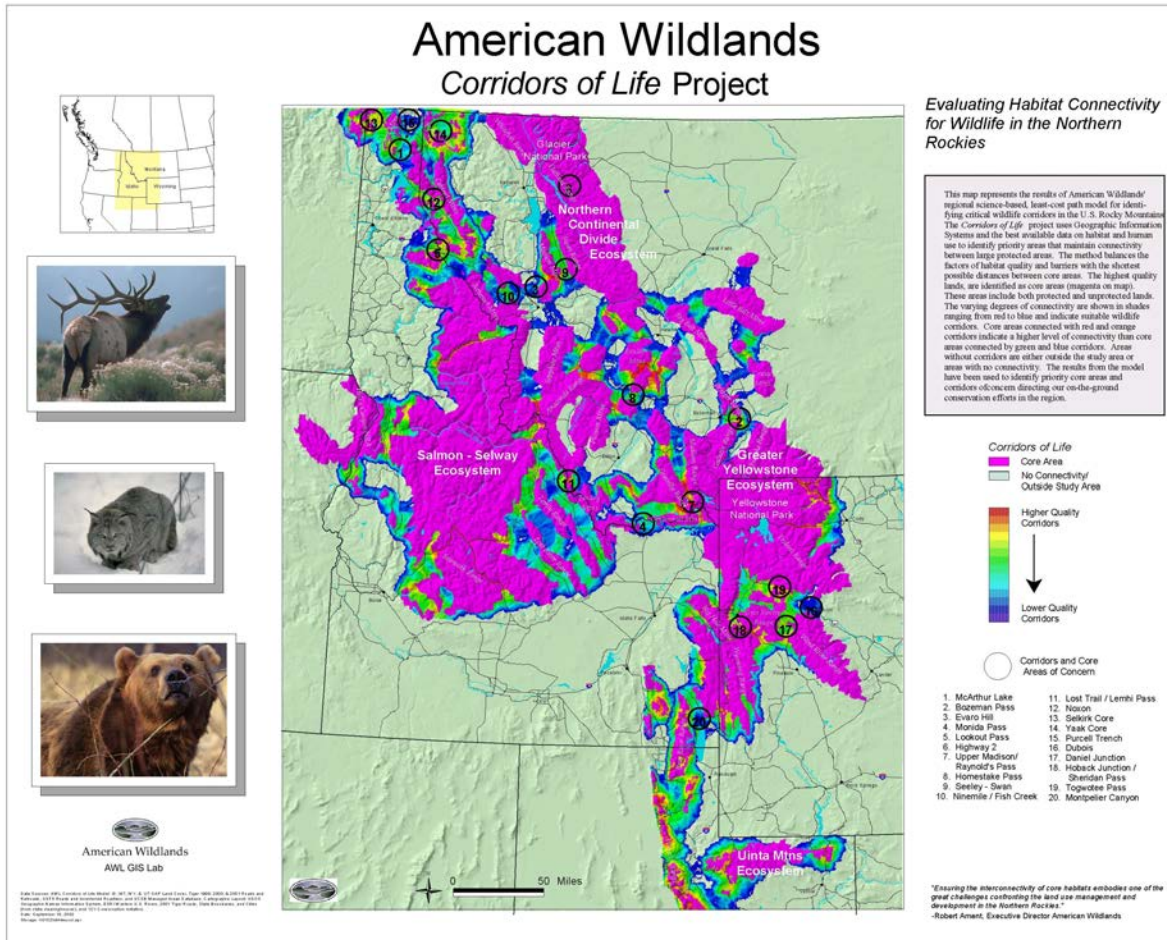
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It has been said that Ogden Valley residents care most about three (order varying) community issues: wildlife, water, and the Monastery. The Ogden Valley IDA Chapter believes that its collaboration with DWR's educational outreach program in the Northern Region is the single best avenue for broad-based dark sky public education. Wildlife Wanders, Owl Prowls, Use Your Ears/Not Your Eyes, and other programs are planned with specific IDA content.

The IDA and other organizations have made the case that light pollution affects wildlife in many ways. The education efforts of Utah DWR (Northern Region) and the Ogden Valley IDA Chapter will focus on local wildlife, a issue of high interest, especially in that Ogden Valley forms part of the globally significant "Corridor of Life," as American Wildlands and The Nature Conservancy of Utah term it, from the Greater Yellowstone eco-system to Utah's Uintah Mountains.

## Weber County Parks

## Wildlife Corridor of Life: from Greater Yellowstone Ecosystem to the Uintah Mountains





## North Fork Park

(Fall 2013) DWR relocation of successfully re-introduced mountain goats from upper reaches of North Fork Park/Ben Lomond Peak



### Public Art

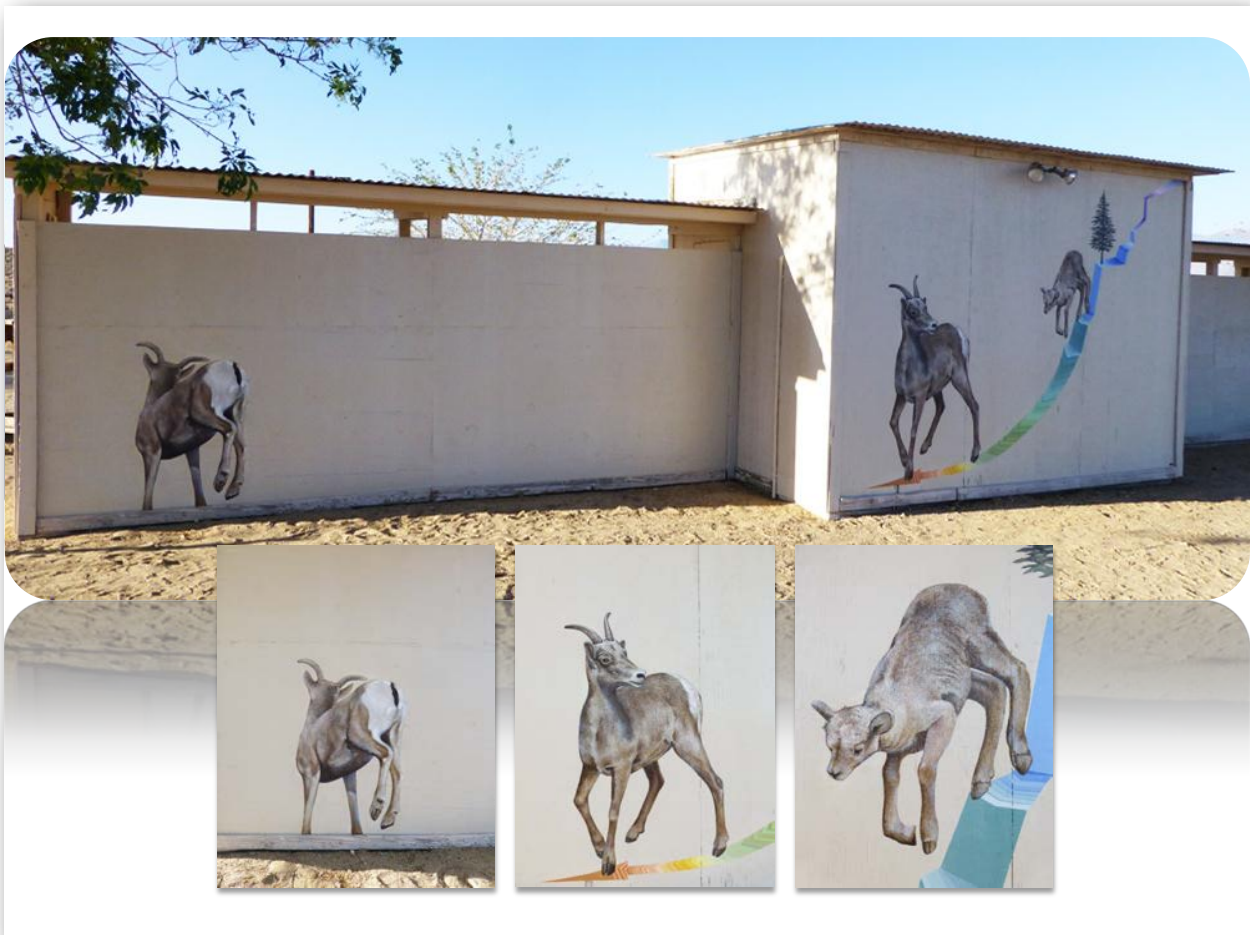
Highly regarded artist Jane Kim is currently under commission to create a large-scale mural for the famed Ornithology Lab at Cornell University. She is, additionally, working with the digital team at the almost-equally-well-known Baltimore Aquarium.

Artist: Jane Kim



Her installation celebrating the migration of the Big Horn Sheep was recently completed in a number of sites spread along 200 miles on the Eastern flank of the Sierra Nevada (one such site, below).

Ogden Valley is exceptionally fortunate that Jane enjoys Utah ties and is willing to invest her time and talent to highlight the dark skies and wildlife of North Fork Park and the Valley.



## North Fork Park

### Wildlife Constellation Gate at North Fork Park

With North Fork's wildlife and its dependence upon dark skies at the fore, Jane Kim has designed an entry-gate<sup>37</sup> at the North/Cutler Flats entrance that will, with the full impact that only large-scale public art can have, introduce and re-enforce the critically important connection between dark skies and wildlife well-being. Ursa Minor will represent the American Black Bear (a special, "Mom, what's with this bear?" constellation version having a long tail resulting from Zeus's toss of the animal into the skies), found in the upper reaches of the Park and depicted through wrought iron with etched glass/acrylic insets. QR coding is planned to bring the visitor a wealth of digital information advising how to access the Park and its dark skies, especially at the Dark Sky Viewing Area, reached through this special dark sky entry way.

The Ogden Valley IDA Chapter is reasonably confident that funds can be raised for the construction of the Wildlife Constellation Gate/Entry Monument in the year following North Fork Park accreditation.

### Envisioning the Ursa Minor Constellation Gate



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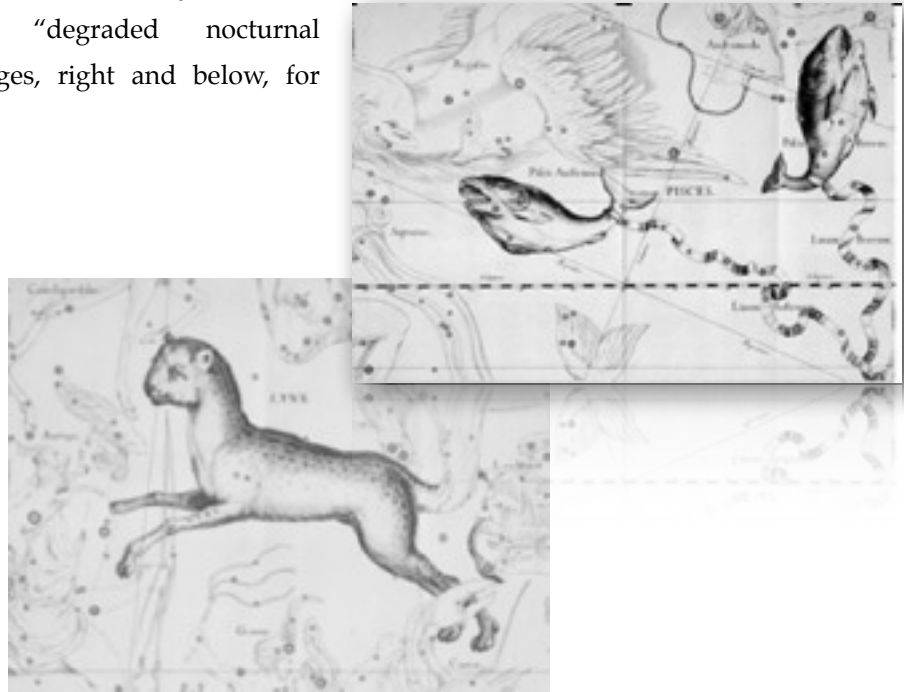
<sup>37</sup> For cost and sustainability reasons, may be modified as a prominent entry side monument.

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## North Fork Park

### Wildlife Constellation Stencils at North Fork Park

A series of stencils celebrating select constellations and affiliated wildlife, *e.g.*, Cutthroat Trout (Pisces), Bobcat (Lynx), Sandhill Crane (Grus), Moose (Lapp/Sami constellation) are planned for signage, boulders and buildings to reinforce the Park’s identity as a dark-sky respite from a “degraded nocturnal environment” (vintage images, right and below, for illustrative purposes only).



### Additional Stencil Use in Ogden Valley

Planned are stencil variations that can be used inexpensively throughout Ogden Valley at sites too small for a full-scale mural, such as the Eden Post Office building (for which stencil permission has already been obtained).

Stencil use is also being considered for a way signage system to further secure community identity as “dark sky” and provide directions to local businesses.



## North Fork Park

### *The Ogden Valley Wildlife Constellation Murals*

Not unlike the Migration Murals (see below, against the Sierra Nevada), the Ogden Valley Wildlife Constellation murals will present a stunning opportunity to celebrate local wildlife and the dark skies upon which they depend.

The murals will also introduce an opportunity to explore ethno-astronomy, incorporating many night sky traditions based on local wildlife, such as elk (Evenk/Russian), moose (Lapp/Sami), hawks (Norse), bats (Mayan), wood rat (Chinese), migrating birds (Baltic/Finnish).

Jane Kim: The Migration Murals (selected site: Mt. Williamson Motel and Base Camp, Independence, CA)





## Community Lighting Projects

### University of Utah, Fort Douglas Historic District

*Dark Sky Pilot Project and Campus Education.* The Fort Douglas pilot project, initiated by senior student Bettymaya Foote (Moab, Utah) with support from the Ogden Valley IDA Chapter [co-presentation to SCIF (Sustainable Campus Initiative Fund)] was installed in June 2014. Five acorn fixtures were replaced by full cut-off fixtures (see before and after photos below) under the direction of Bill Leach<sup>38</sup> who noted:



“The University is currently upgrading all of the exterior lighting to become dark-sky compliant. Because of the huge number of walkway and parking lots on campus, we have been upgrading as budgets allow. Much of the lower campus has been done as well as a considerable portion of the Medical Campus. Because the Fort Douglas campus had not been addressed, the pilot project was particularly timely as we try to address the dark-sky compliant goal while keeping the historic flavor of the space.”

“The current campus standard fixture for both walkways and parking lots is a dark-sky compliant fixture which ensures that all new construction projects specify them. U of U is also looking at updating campus standards to require dark-sky compliant wall pack fixtures on building exteriors and are moving towards the use of LED exterior fixtures which will also help with light control.”

An on-campus event (February/March 2015) to celebrate the successful project completion will include screening of the award-winning PBS program *The City Dark* and a panel featuring Prof. Jeremy Bryson. SCIF and the Ogden Valley IDA Chapter (Bettymaya Foote and Jess Dwyer) are coordinating.



Before (background)  
After (foreground)



After



After

---

<sup>38</sup> Lighting Specialist, Facilities Operations Energy Management, University of Utah

## North Fork Park

### Powder Mountain Ski Resort



The Ogden Valley IDA Chapter introduced Summit Mountain Holdings, owner of Powder Mountain ski resort (one of the largest ski resorts by acreage in the United States, overlooking Ogden Valley and spread across parts of Weber and Cache Counties), to the low-glare night skiing system installed at Steamboat Springs by Ultra-Tech, a company that originally designed lighting that would not disturb migrating turtles near a conservatory. “The lights, which are sealed and transfer electrical current via a magnetic field, are dark sky-compliant” (Denver Post: Low Glare Lights Are a Hit on Steamboat Ski Slopes).<sup>39</sup>

Powder Mountain presently has plans to install the Ultra-Tech lighting (which also reduces energy costs) in the current and subsequent construction seasons.



The Steamboat ski area installed high-tech new lights for night skiing this season. (Larry Pierce, Special to The Denver Post)

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<sup>39</sup> [http://www.denverpost.com/business/ci\\_25010484/low-glare-lights-are-hit-ski-slopes](http://www.denverpost.com/business/ci_25010484/low-glare-lights-are-hit-ski-slopes)

---

## North Fork Park

### Eden Fire Station 62 (in process)

The Chief and Marshall of the Weber County Fire District moved quickly to shield the floodlights at the Eden Fire Station 62 pending the installation of more permanent dark sky lighting.



[Weber County Fire District: Dave Austin (Chief) and Brandon Thueson (Marshall, holding parashields)]

“We are pleased to support the accreditation of North Fork Park and have worked to make our buildings an example of effective, secure, dark-sky-friendly lighting.”

- Weber County Fire District Chief David Austin

-

BEFORE



INTERIM SHIELDED (final in process)



Additionally, a solar-powered, downward-directed flagpole light fixture has been installed and successfully operated. The same model will be installed at the Huntsville Fire Station.

## North Fork Park

### Eden Post Office (in process)

BEFORE



AFTER



Eden Post Office Manager Jeannie Marsell has given permission for dark sky lighting installation (funds to be provided by Summit Mountain Holding) and a wildlife constellation mural or stencil on the south-facing exterior wall. Interpreted signage to be added.

Additionally, after the successful test of the solar-powered flag light fixture at the Eden Fire Station, the Eden Post Office will adopt the same make/model (see photo above right: Frank Cumberland presenting new light fixture to Jeannie Marsell, January 5, 2015).

The Eden Post Office faces the busiest intersection in the Valley, and its dark sky project will enjoy high community visibility.

### Additional Community Projects

Also having significant impact to the community were the Spring 2013 dark sky educational conversations with local businesses (and a comprehensive dark sky presentation to the Ogden Valley Business Association) that resulted in lighting improvements visible to the community:

*(noted previously in Issue Leadership)*

- ▶ Elkridge Engineering (under-canopy lights wattage dimmed)
- ▶ Iverson Dental (internally-illuminated sign turned off at regular time each night)
- ▶ Moose Hollow HOA (wattage dimmed in atria)
- ▶ Snowberry Inn (shields added to sign floodlights)
- ▶ Summit Welcome Center (atrium lights turned off just after closing)
- ▶ St. Florence Church (replaced 18-inch pole-mounted globe lights with fully shielded fixtures)
- ▶ Snowcrest Junior High (exempt LED sign hours seasonal and curfewed)
- ▶ Valley Elementary School (exempt LED sign hours seasonal and curfewed)
- ▶ WorldMark by Wyndham at Wolf Creek (working with electrical contractor for phased exterior lighting remediation through several budget cycles)



## Vision

The Ogden Valley IDA Chapter will work to accomplish the following outcomes in the several years following accreditation. With dedication, persistence and voice, it believes it will be able to influence those within the relevant spheres of control both to commit to the importance of dark skies and summon the discipline necessary to reclaim and preserve them.

1. The first dark sky branding of a community (Ogden Valley) through the power of public art

- ▶ Wildlife Constellation Gate/Monument at North Fork Park
- ▶ Wildlife Constellation Stencils throughout North Fork Park and Ogden Valley
- ▶ Wildlife Constellation Murals throughout Ogden Valley (schools, library, other)
- ▶ Way signage with wildlife constellations and Ogden Valley Dark Sky branding
- ▶ A new Ogden Valley Heritage Center developed to showcase the Valley's dark sky and agricultural legacies

2. Revised Ogden Valley lighting and signage ordinances recognized through the Utah and regional APA chapters, and otherwise, as Amenity West models.

3. A consortium of northern Utah universities - Weber State University, University of Utah and Utah State University - taking a coordinated and IDA-affiliated leadership position on dark sky research and technology.

.....  
The Ogden Valley IDA Chapter has been the grateful recipient of considerable time and attention from IDA staff members and hopes to reciprocate by becoming a strategic partner and bellwether chapter.  
.....

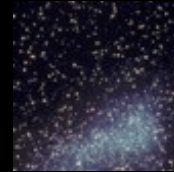
## North Fork Park

Weber County Parks and Recreation  
Ogden Valley GEM Committee  
Ogden Valley Starry Nights  
International Dark-Sky Association

[www.starrynightsutah.org](http://www.starrynightsutah.org)  
[www.darksky.org](http://www.darksky.org)



North Fork Park



The Milky Way



A sense of wonder

**IDA International Dark Sky Park Accreditation**  
North Fork Park!



## Letters by Category

### Supporters

#### State of Utah

- ▶ The Honorable Robert W. Bishop, U.S. House of Representatives
- ▶ Utah State Governor's Office of Economic Development
- ▶ Representative Gage Froerer, House District 8, Utah State Legislature
- ▶ Utah Division of Wildlife Resources [Justin Dolling, Northern Region Supervisor]

#### Weber County

- ▶ Commissioner Matthew Bell (Weber County)
- ▶ Commissioner Kerry Gibson (Weber County)
- ▶ Commissioner Jan Zogmaister (Weber County)
- ▶ Pen Hollist, Chair, Ogden Valley Planning Commission
- ▶ Executive Director/CEO Sara Toliver, Weber/Ogden Convention & Visitor Bureau

#### Abbey of Our Lady of the Holy Trinity (Trappist Monastery)

- ▶ Fr. Charles (for the Appointed Superior Fr. Brendan Freeman)

#### Weber State University

- ▶ Professor Stacy Palen (Physics) Jennifer Bodine, Sustainability Specialist

#### Ogden City

- ▶ Mike Caldwell, Mayor

#### North Ogden City

- ▶ Brent Taylor, Mayor

#### Huntsville Town

- ▶ Mayor (Jim Truett) and Town Council

## North Fork Park

Wasatch Audubon Society

- ▶ Katie McVey, President

### Collaborators

- ▶ Weber State University [Charles A. Wight, President] [Bryan Dorsey, Department of Geography Chair]
- ▶ Ogden Astronomical Society

### Nominators

- ▶ Weber County Parks (Jennifer Graham, Director)
- ▶ Ogden Valley IDA Chapter Steering Committee [Janet Muir, Frank Cumberland, Steve Clarke, and Kimbal Wheatley (GEM Committee, Chair)]

.....

## Supporters



## North Fork Park

HOUSE OFFICE BUILDING  
NATIONAL, DC 20515  
(202) 225-0403

425TH STREET  
SUITE 1017  
DEN, UT 84401  
(313) 426-0107

10TH MAIN STREET  
MOUNTAIN CITY, UT 84037  
(360) 734-2273



**Congress of the United States**  
**House of Representatives**  
Washington, DC 20515-4401

COMMITTEE ON  
NATURAL RESOURCES  
CHAIRMAN, SUBCOMMITTEE  
PUBLIC LANDS AND ENVIRONMENTAL  
REGULATION

COMMITTEE ON RULES

CONGRESSIONAL WESTERN  
IMMEDIATE PAST CHAIRMAN

10TH AMENDMENT TASK  
CHAIRMAN

April 30, 2014

IDA Board of Directors  
International Dark-Sky Association  
3223 N. 1<sup>st</sup> Avenue  
Tucson, AZ 85719

Re: Accreditation Application – North Fork Park

To the IDSP Accreditation Committee Members:

I write this letter to support the application for accreditation of North Fork Park as an International Dark-Sky Park and do so to support the efforts to further economic development in Weber County, Ogden City, North Ogden City, Huntsville Town, and Ogden Valley. I note that this initiative has wide local support.

North Fork Park has long been a local jewel and a chosen destination, whether in the United States or abroad. It will be good to see a Northern Utah venue be included in the astro-tourism activity that continues to grow in Southern Utah as opportunities to see the dark skies diminish in the urban areas.

Thank you to this Committee for your consideration.

Sincerely,

Rob Bishop  
Member of Congress

## North Fork Park



### Governor's Office of Economic Development

BUSINESS • TOURISM • FILM

State of Utah

JARY R. HERBERT  
Governor

SPENCER J. COX  
Lieutenant Governor

SPENCER P. ECCLES  
Executive Director

VICKI VARELA  
Managing Director  
Tourism, Film & Global Branding

IDA Board of Directors  
International Dark-Sky Association  
3223 N. 1st Avenue  
Tucson, AZ 85719

April 25, 2014

To the IDSP Accreditation Committee Members:

Utah's "Life Elevated" branding has, since 2006, been an attempt to capture visitors' astonishment at, and assessment of, Utah's range of beauty, breadth of recreation and quality of life possibilities.

And now, it seems, a kind of "Eyes Elevated" opportunity presents itself; we are pleased to support efforts to accredit North Fork Park as a prestigious International Dark-Sky Park and further solidify Utah's international reputation as a premier dark-sky destination.

We believe that with an IDA-accredited anchor in Southern Utah (Natural Bridges) and the possibility of one in Northern Utah (North Fork Park), significant statewide leverage can be employed to promote astro-tourism to some portion of the 80% of the world's population now unable to view The Milky Way.

Upon the happy occasion of accreditation, we look forward to collaborating with Weber County on appropriate media coverage.

Sincerely,

Vicki Varela, Managing Director

David M. Williams, Associate Managing Director

cc: Sara Toliver, President & CEO, Ogden/Weber Convention & Visitors Bureau  
Weber County Commissioner Matthew Bell  
Weber County Commissioner Jan Zogmaister  
Weber County Commissioner Kerry Gibson  
Sean Wilkinson, Director, Weber County Planning  
Scott Mendoza, Weber County Planning  
Jennifer Graham, Director of Weber County Recreation Facilities

**UTAH**

Council Hall/Capitol Hill • 300 N State Street • Salt Lake City, Utah 84114 • (801) 538-1900 • [www.visitutah.com](http://www.visitutah.com)

# North Fork Park

## HOUSE OF REPRESENTATIVES STATE OF UTAH

REPRESENTATIVE  
GAGE FROERER  
DISTRICT 8  
WEBER COUNTY



P.O. BOX 379  
HUNTSVILLE, UTAH 84317  
HOME (801) 748-0505  
WORK (801) 621-0505  
CELL (801) 391-4233  
FAX (801) 621-0506  
E-Mail: gfroerer@utah.gov

IDA Board of Directors  
International Dark-Sky Association  
3223 N. 1st Avenue

Tucson, AZ 85719

July 30, 2014

To the IDSP Accreditation Committee Members:

As both Utah State Representative of District 8 and a resident of Ogden Valley, I am proud to endorse the application for North Fork Park's accreditation as an International Dark-Sky Park. The park has long been a favored destination for both locals and Wasatch Front neighbors who seek its scenic beauty, recreation opportunities and, yes, the remarkably dark skies that have now been documented by the Weber State University teams.

The Ogden Valley Starry Nights endeavor to build shoulder-season activity for local businesses hopefully will be bolstered by an "economic boom" of the type experienced by The Headlands in Emmet County, Michigan after accreditation.

We appreciate this Committee's consideration of North Fork Park.

Sincerely,

A handwritten signature in blue ink, appearing to read "Gage", followed by a long horizontal flourish.

Gage Froerer, District 8  
Utah House of Representative.

# North Fork Park



GARY R. HERBERT  
Governor

SPENCER J. COX  
Lieutenant Governor

## State of Utah

### DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
Executive Director

#### Division of Wildlife Resources

GREGORY J. SHEEHAN  
Division Director

December 4, 2014

IDA Board of Directors  
International Dark-Sky Association  
3223 N. First Avenue  
Tucson, AZ 85719

Dear IDSP Accreditation Committee Members:

The Utah Division of Wildlife Resources (UDWR) is pleased to support the Ogden Valley Starry Nights IDA Chapter and Weber County Parks and Recreation in efforts to raise public awareness of wildlife in North Fork Park and throughout Ogden Valley.

UDWR supports efforts to promote wildlife art and wildlife educational experiences for residents and visitors to North Fork Park and Ogden Valley. The use of wildlife constellations (*Ursus*, *Cygnus*, etc...) is an intriguing way to bring the public into a greater awareness of wildlife that is only a short drive away. The future proposal to include wildlife art within the Ogden Valley community "at large" should also bring wildlife into daily focus, and add to the overall quality of life.

UDWR believes that wildlife is important to everyone, and the wildlife focus of the current accreditation application will increase public awareness and understanding of wildlife. We look forward to developing a partnership with the Starry Nights Chapter, Wasatch Audubon, and Weber County Parks and Recreation to assist with developing educational opportunities which get people outside to learn about and experience wildlife.

Sincerely

A handwritten signature in black ink that reads "Justin Dolling".

Justin Dolling  
Utah Division of Wildlife Resources  
Northern Region Supervisor

1594 West North Temple, Suite 2110, PO Box 146301, Salt Lake City, UT 84114-6301  
telephone (801) 538-4700 • facsimile (801) 538-4709 • TTY (801) 538-7458 • [www.wildlife.utah.gov](http://www.wildlife.utah.gov)



# North Fork Park



County Commission  
Weber Center  
2380 Washington Blvd.  
Suite 360  
(801) 399-8406  
FAX (801) 399-8305

## COUNTY COMMISSION

Matthew G Bell  
Commissioner

Kerry W. Gibson  
Commissioner

Jan M. Zogmaister  
Commissioner

IDA Board of Directors  
International Dark Sky Association  
3223 N. First Avenue  
Tucson, AZ 85719

January 2, 2013

Dear Directors,

I write this letter, in great enthusiasm, to support the application for accreditation of North Fork Park as an International Dark Sky Park (Bronze).

North Fork Park is fabled. It has served as summer pasturage for the Shoshone Indians; as prime beaver territory for American, English and French trappers; as a foothill range for sheep; and, finally, as a much-loved park essential for wilderness experience in a county split by the scenic Wasatch mountains and connected by canyons and mountain passes. North Fork Park provides a much needed natural respite for residents and visitors in both day and evening hours.

Weber County is proud to have passed the first local dark-sky laws in the state of Utah (Ogden Valley Lighting and Sign Ordinances) and to be moving into a leadership position with respect to the many advantages of dark-sky lighting: protection of the starry skies, enhanced energy savings, and, importantly, improved security (I spent many years in the Weber County Sheriff's Office and know this to be true).

We are delighted that the SQM readings taken by the Weber State University team confirm what we have long known: the night sky in North Fork Park is exceptional.

Sincerely,

Matthew G Bell, Weber County Commissioner

pc: Jennifer Graham, Director of Weber County Recreation Facilities





# North Fork Park



County Commission  
Weber Center  
2380 Washington Blvd.  
Suite 360  
(801) 399-8406  
FAX (801) 399-8305

## COUNTY COMMISSION

Matthew G Bell  
Commissioner

Kerry W. Gibson  
Commissioner

Jan M. Zogmaister  
Commissioner

IDA Board of Directors  
International Dark-Sky Association  
3223 N. 1st Avenue  
Tucson, AZ 85719

March 25, 2014

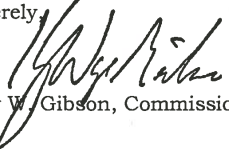
Dear Committee Members:

As both a Commissioner and owner of small businesses, I have been interested in following the data indicating that designation of an International Dark Sky Park brings economic development to the surrounding communities. We have worked hard to support the small, local businesses in Ogden Valley that add so much to the visitor experience and retention of the Valley's semi-rural atmosphere. The experience of The Headlands in Emmet County, Michigan has been especially instructive to us, and we believe that this kind of responsible economic development fits well with our existing support of business, including that spurred by the relatively new agri-tourism ordinance.

North Fork Park is a worthy centerpiece of our efforts to build astro-tourism, as the Weber State University team has demonstrated with their sky quality readings. The park is a resource of tremendous value to the entire county, especially those on the Wasatch Front, and we would welcome its recognition by the IDA.

I would like to add my voice to support of the application of accreditation for North Fork Park as an International Dark Sky Park.

Sincerely,

  
Kerry W. Gibson, Commissioner



# North Fork Park



**Matthew G Bell**  
Commissioner  
mbell@co.weber.ut.us

**Kerry W. Gibson**  
Commissioner  
kgibson@co.weber.ut.us

**Jan M. Zogmaister**  
Commissioner  
jzogmaister@co.weber.ut.us

**County Commission**  
Weber Center  
2380 Washington Blvd.  
Suite 360  
Ogden, UT 84401  
(801) 399-8406  
FAX (801) 399-8305  
www.co.weber.ut.us

IDA Board of Directors  
International Dark Sky Association  
3223 N. 1st Avenue  
Tucson, AZ 85719

March 15, 2014

To the IDA Dark-Sky Places Committee Members:

I write this letter in support of the application for accreditation of North Fork Park, long a source of great pride in our community, as an International Dark-Sky Park.

The goals of the dark-sky initiative are supportive of our broader county goals of sustainable, responsible stewardship and economic growth: to provide Ogden Valley with shoulder-season astro/eco-tourism; to reinforce the existing agri-tourism ordinance; to remain competitive among those "amenity West" communities that have adopted dark-sky controls; to preserve our Wasatch Back from the light pollution of the Wasatch Front; to save wasted energy dollars; and, most important, to preserve our starry night skies that are viewed best from North Fork Park, an historic place of striking natural beauty.

We have been impressed by the breadth of this initiative and, especially, the support and direction from Weber State University, particularly its departments of Geography (a student team, as directed by Professor Jeremy Bryson, captured and recorded the initial Sky Quality Meter readings) and Physics, as well as that from the leadership (Professor Stacy Palen) of the Ott Planetarium, a community resource notable for its educational outreach.



## North Fork Park

We also commend the support from our world-famous ski resorts Powder Mountain and Snowbasin.

Of particular interest are the plans to use public art to reinforce themes of dark-sky and rural heritage. We recognize the proposed entrance gate designs are part of a later phase but appreciate the broader vision and opportunity that accreditation will bring to both the park and the valley at large. Ogden City and Weber County have earned a modest, but hard-won leadership position in Utah with respect to public art that reinforces community identity, and it only makes sense to extend those efforts to Ogden Valley and North Fork Park. The opportunities for celebrating the constellations, whether Greek or Shoshone, through public art are immensely exciting.

Our thanks to this Committee for its time and efforts in considering IDA Dark-Sky accreditation of North Fork Park.

Sincerely,



Jan M. Zogmaister, Commissioner

cc: Sean Wilkinson, Director of Weber County Planning  
Scott Mendoza, Weber County Planning  
Diane Stern, Chair, Weber Arts Council  
Professor Stacy Palen, Weber State University  
Professor Jeremy Bryson, Weber State University  
Greg Mauro, Chairman, Summit Mountain Holding Group  
John Loomis, General Manager, Snowbasin Resort  
Jennifer Graham, Director of Weber County Recreation Facilities



## North Fork Park



### PLANNING COMMISSION

2380 Washington Blvd., Suite 240  
Ogden, Utah 84401-1473  
(801) 399-8791

IDA Board of Directors  
International Dark-Sky Association  
3223 N. 1st Avenue  
Tucson, AZ 85719

May 13, 2014

To the IDSP Accreditation Committee Members:

We are pleased to join Weber County Commissioners Bell, Gibson and Zogmaister in supporting the application of North Fork Park to join the current prestigious group of International Dark-Sky Parks.

We particularly welcome the opportunity for activities under the relatively new Agri-Tourism Ordinance to be bolstered by those of astro-tourism, now such a force in Southern Utah. The Park's dark skies do, indeed, provide a respite from the densely populated and brightly lit Wasatch Front.

Thank you to this Committee for consideration of the application.

Sincerely,

Pen Hollist, Chair

cc: Weber County Commissioner Matthew Bell  
Weber County Commissioner Jan Zogmaister  
Weber County Commissioner Kerry Gibson  
Sean Wilkinson, Director, Weber County Planning  
Jennifer Graham, Director of Weber County Recreation Facilities

Printed on recycled paper

# North Fork Park



2438 Washington Blvd.  
Ogden, UT 84401  
p: 1-866-867-8824  
[www.visitogden.com](http://www.visitogden.com)

IDA Board of Directors  
International Dark Sky Association  
3223 N. First Avenue  
Tucson, AZ 85719

February 1, 2014

Dear Accreditation Committee:

Near the sites of a number of 2002 Winter Olympic events and a major venue for annual Sundance Film Festival screenings, Ogden has reinvented itself in the 21<sup>st</sup> century from an early railroad town with a colorful, even notorious, reputation to a center of attraction for visitors word-wide seeking outdoor recreation and urban sophistication – “from mountain to metro,” as we term it.

We are exceptionally proud in Weber County and Ogden City that, in recent years, our national and international profiles have been raised due, in part, to: a) reinvigoration of downtown Ogden and increase in numbers of corporate headquarters, b) expanded opportunities for outdoor recreation (especially world-class skiing); c) innovative programs of public art and a rapidly broadening range of arts events, and d) the stunning scenic beauty of Ogden Valley.

We write this letter as one of endorsement and support for the applications for IDA accreditation for North Fork Park as an IDSP and Ogden Valley as a Dark Sky Community. We believe that prestigious recognition at this level will accelerate a process that has already begun: the careful county planning and community work that goes into preserving Ogden Valley’s rural, agricultural heritage and the exceptional quality of its night skies. We who live on the Wasatch Front value a place nearby where we can view the stars as our ancestors did – difficult to find these days.

We are following closely the production of new data on economic development for areas around an International Dark Sky Park and believe that Weber County can benefit from the type of responsible, considered development that preserves what we love best about the land and the community.

We will be happy to discuss this letter of endorsement further, but, please know this: the accreditation of both North Fork Park and Ogden Valley has our enthusiastic support.

Best regards,

A handwritten signature in dark ink, appearing to read "Sara Toliver".

Sara Toliver  
President /CEO



## North Fork Park



WEBER STATE UNIVERSITY

DEPARTMENT OF PHYSICS

Professor Stacy Palen, Department of Physics  
Director, Ott Planetarium  
Weber State University  
3848 Harrison Blvd.  
Ogden, Utah 84408

IDA Board of Directors  
International Dark Sky Association  
3223 N. 1st Avenue

Tucson, AZ 85719

March 19, 2014

IDA Dark-Sky Places Committee Members:

In my dual roles at Weber State University, both teaching in the Department of Physics and in a leadership position at the Ott Planetarium, I am in a particularly advantageous position to support Weber County's dark-sky initiative in Ogden Valley and, more specifically, the undertaking to obtain accreditation as an International Dark-Sky Park for North Fork Park.

I have also been active in the planning for WSU's major new science facility which includes LEED-certification and dark-sky lighting design; upon completion of construction, we will be able to view the stars much more easily from this highly urbanized location on the Wasatch Front than we can from our current location. The rooftop observatory, which will be used for astronomical instruction, outreach and research, supports the recruitment and retention of students in STEM-related fields that are so critical to the modern technology-based economy.

The Ott Planetarium is a leader in science outreach programs, with a large collection of video productions that are distributed worldwide, as well as an extensive local outreach program that reaches more than 20,000 individuals annually. I am eager to explore the possibility of linking the outreach capabilities of Ott Planetarium to the dark-sky education activities related to North Fork Park, thereby capitalizing upon

DEPARTMENT OF PHYSICS  
WEBER STATE UNIVERSITY | 2508 UNIVERSITY CIRCLE | OGDEN UT 84408-2508  
(801) 626-6163 | PHYSICS.WEBER.EDU | E-MAIL: PHYSICS@WEBER.EDU

## North Fork Park

the excitement surrounding international recognition of a local park that has the distinct advantage of glow-shielding from some of the most magnificent mountains in the American West.

Indeed, a dark-sky conversation between the Wasatch Front (with Bortle levels equal to those in parts of the Los Angeles Basin) and the Wasatch Back, where North Fork Park and Ogden Valley are located, has already begun.

I am particularly interested in the follow-on plans to use public art to educate the many visitors - from local to international - about the dark skies, the needs of wildlife, and the ways in which diverse cultures, particularly the Shoshone, interpreted the pictures stars make in the mystery of the night.

Thank you to this committee for its consideration of North Fork Park: I hope to be able to celebrate its accreditation here in a way that educates the wider base of Northern Utahns, most of whom need to strain for opportunities to see even a faded Milky Way.

Sincerely,



Dr. Stacy Palen

cc: Charles A. Wight, President, Weber State University  
Professor Jeremy Bryson, Weber State University  
Jennifer Graham, Director of Weber County Recreation Facilities  
Craig Browne, President, Ogden Astronomical Society

## North Fork Park

### Abbey of Our Lady of the Holy Trinity

1250 South 9500 East  
Huntsville UT 84317

(801) 745 3784

April 14, 2014

Dear Ms. Muir:

You have a praiseworthy cause in  
your dark-sky efforts at North Fork Park.

Sincerely,

Fr. Charles Gummings, OCSO

(Author of *Eco-Spirituality: Toward a Reverent Life*)



## North Fork Park



April 15, 2014

Board of Directors  
International Dark Sky Association  
3223 N. 1st Avenue  
Tucson, AZ 85719

IDA Dark-Sky Places Committee Members:

North Fork Park is a tremendous asset to our community and I'm proud to support the application for accreditation of North Fork Park as an International Dark-Sky Park, along with our county commissioners. The fact that North Fork Park remains dark amid a highly developed area is remarkable and we support this effort to recognize the dark-sky quality of its night skies as measured by the Weber State University team.

Our citizens can enjoy the dark skies and mesmerizing stargazing offered at North Fork Park by taking a short trip up the Ogden Canyon through our lovely Ogden Valley. The park nestled against National Forest lands provides our citizens with a large open space that offers hiking, biking, cross-country skiing, camping and many other activities enjoyed throughout the great outdoors of the Western United States.

It has been my pleasure to serve as the Mayor of Ogden City where recreation and revitalization are an integral part of our economy and our mission to make our city an even better place to live, work and play. We continue to receive national attention for attracting outdoor recreation companies that support our growing local economy, while continuing to build upon a vibrant public art program, and supporting initiatives that attract visitors who enjoy the classic Western setting and active lifestyle advantages of Ogden City.

Sincerely,

A handwritten signature in blue ink, appearing to read "Mike Caldwell".

Mike Caldwell  
Mayor of Ogden

cc: Charles A. Wight, President, Weber State University  
Commissioner Matthew Bell, Weber County  
Professor Jeremy Bryson, Weber State University  
Jennifer Graham, Director of Weber County Recreation Facilities  
Craig Browne, President, Ogden Astronomical Society

## North Fork Park

NORTH OGDEN CITY  
505 EAST 2600 NORTH  
NORTH OGDEN, UT 84414  
PHONE: (801) 782-7211  
FAX: (801) 737-2219  
www.northogdencity.com



MAYOR BRENT TAYLOR  
COUNCIL KENT BAILEY  
JUSTIN FAWSON  
LYNN SATTERTHWAITE  
CHERYL STOKER  
JAMES D. URRY

IDA Board of Directors  
International Dark Sky Association  
3223 N. 1<sup>st</sup> Avenue  
Tucson, AZ 85719

April 3, 2014

Dear Directors:

I am pleased to write a letter in support of the application for accreditation of North Fork Park as an International Dark Sky Park.

Ogden Valley has been long-treasured by its residents and neighboring communities, such as North Ogden City, and has been celebrated for its scenic beauty and agricultural heritage by artists, writers, sports enthusiasts, and visitors from around the world. As they work to preserve their legacy of dark skies and rural environment, this accreditation will save wasted energy dollars and most importantly, preserve our starry night skies, which are breathtaking from North Fork Park in its beautiful, natural setting.

I thank the Board of Directors for its consideration of North Fork Park and fully endorse the accreditation of North Fork Park.

Sincerely,

Brent R. Taylor  
North Ogden City Mayor



## North Fork Park



**Phone** 801.745.3420  
**Fax** 801.745.1792  
**Web** HuntsvilleTown.com

P.O. Box 267  
Huntsville, UT 84317

**Mayor**  
James A. Truett

**Town Council**  
Max Ferre'  
Mike Engstrom  
Doug Allen  
Bill Wangsgard

**Town Clerk/Recorder**  
Gail Ahlstrom

**Treasurer**  
Linda Laws

**Attorney**  
Jenna Holt

IDA Board of Directors  
International Dark Sky Association  
3223 N. 1st Avenue  
Tucson, AZ 85719

March 21, 2014

IDA Dark-Sky Places Committee Members:

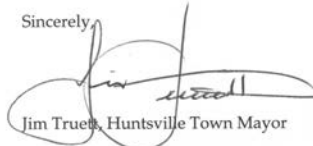
Huntsville Town is the sole incorporated municipality in Ogden Valley. Its pioneer history dates from 1860 when former Mormon Battalion Captain Jefferson Hunt and a small group of settlers arrived; its Shoshone history of summer pasturage stretches hundreds of years earlier.

Huntsville has a dark-sky ordinance modeled on that of Weber County (which was the first in the State of Utah), and, just as important, a reasonable record of enforcement. These efforts help to preserve the qualities of an old-fashioned, quintessential American small town surrounded by farms and ranches while dealing with the pressures of suburban-style and second-home growth.

We, as elected representatives of Huntsville Town, support the IDA accreditation application proposing North Fork Park as a prestigious International Dark-Sky Park and the broader goals of the dark-sky initiative: preserving our agricultural heritage and legacy dark skies, saving energy dollars, and improving security and aesthetics.

Thank you to this committee for its consideration of North Fork Park: we hope to be able to celebrate the accreditation in a way that educates the wider base of Northern Utahans, most of whom must strain for opportunities to see even a faded Milky Way.

Sincerely,



Jim Truett, Huntsville Town Mayor

Cc: Council Members Mike Engstrom, Doug Allen, Max Ferre',  
and Bill Wangsgard  
Jennifer Graham, Director of Weber County Recreation Facilities

## North Fork Park



Wasatch Audubon Society  
PO Box 3211, Ogden, UT 84409

IDA Board of Directors  
International Dark Sky Association  
3223 N. First Avenue  
Tucson, AZ 85719

September 29, 2014

Accreditation Committee:

The Wasatch Audubon Society is pleased to support the application for accreditation for North Fork Park as an International Dark Sky Park.

Dense urbanization and brightening night skies along the Wasatch Front have greatly changed the landscape in the past several decades. Wildlife, especially birds, can be impacted by such large-scale changes. Many bird species, including warblers and shorebirds migrate at night, using stars to navigate. Light pollution can obscure the night sky's visual cues and cause birds to veer off course. Additionally many birds time breeding and migration cycles by photoperiod. Light pollution can artificially lengthen photoperiod and disrupt bird species natural circadian rhythms.

Wasatch Audubon is already working with North Fork Park to increase birding awareness and opportunities by compiling a birding checklist for North Fork Park that includes 145 species. We look forward to working together with the dark-skies folks in Ogden Valley both in monitoring the birds at North Fork Park and educating the public about supporting healthy habitats for year-round residents and the many species of birds who migrate through the Wasatch Front each year.

Please feel free to contact me or our Dark Sky Park liaison, Lynn Carroll, email: [bradlynn@comcast.net](mailto:bradlynn@comcast.net), phone: 801-392-8216, if you have any questions or would like more information.

Sincerely,

  
Katie McVey, President  
Wasatch Audubon Society  
[mcveka01@gmail.com](mailto:mcveka01@gmail.com)  
715-216-2605

## Collaborators

## North Fork Park



**WEBER STATE UNIVERSITY**  
Office of the President



May 10, 2014

IDA Board of Directors  
International Dark-Sky Association  
3223 N. 1st Avenue  
Tucson, AZ 85719

To the IDSP Accreditation Committee Members:

Weber State University (WSU) has played a foundational role in the effort to gain accreditation of North Fork Park as an International Dark-Sky Park. The endeavor appears to have secured an unusually broad base of support, at government, community and individual levels.

At WSU, the Departments of Geography, Physics and Visual Arts (as well as the Ott Planetarium, the Energy & Sustainability Office, the Center for Community Engaged Learning, Media Relations, and the Weber Arts Council) have all become involved in the effort.

The Department of Geography, in particular, has taken on a series of tasks, not only gathering the necessary SQM readings (and committing to continued monitoring), but also conducting original research concerning the broader issues of model dark-sky controls, economic development and how those issues are playing out in dozens of "Amenity West" communities. This information will be highly useful in Weber County's review of Utah's first dark-sky ordinance (Ogden Valley Lighting Ordinance). Additionally, the Department of Physics has acted as advisor from the outset and, with the Ott Planetarium, is well situated to leverage the impact of accreditation on public outreach.

The intensity and scope of these efforts have resulted in WSU joining the Utah Division of Wildlife Resources and the Ogden Astronomical Society as application Collaborators. We appreciate this Committee's consideration.

Sincerely,

A handwritten signature in black ink, appearing to read 'C. Wight'.

Charles A. Wight, President

Charles A. Wight, President | Weber State University

1001 University Circle, Ogden UT 84408-1001 | ☎ 801-626-6001 | ☎ 801-626-8021 | [weber.edu/dream125](http://weber.edu/dream125)

# North Fork Park



WEBER STATE UNIVERSITY

DEPARTMENT OF GEOGRAPHY

IDA Board of Directors  
International Dark-Sky Association  
3223 N. 1st Avenue  
Tucson, AZ 85719

August 06, 2014

To the IDSP Accreditation Committee Members:

On behalf of the Weber State University Department of Geography, we are pleased to offer our support for North Fork Park to receive recognition as a Dark Sky Park.

Since the 2013-2014 academic year, faculty and students in an upper-division Sustainable Land Use Planning course have been involved in preparing elements of the North Fork Park application, and we look forward to continuing our support of the park long after its designation is approved. Student involvement in preparing the application has already been valuable. Students have gained important experience with field techniques as they have worked to measure, record, analyze, and map sky quality measurement data. These are important skills that students will carry with them regardless of their chosen professions.

Additionally, students have been able to experience the real world application of some of the sustainable land use planning strategies they have learned in class. Students are finding valuable insights into sustainability planning, and two students worked together with Dr. Jeremy Bryson to prepare a paper that they presented at an academic conference and published in a peer-reviewed journal (the article, "Planning for Dark Skies: Lighting Ordinances in the Intermountain West," is included as an appendix to this application).

One of the central aims of the Department of Geography at Weber State University is to provide opportunities for students to combine meaningful real world experiences with their classroom learning. Participating in dark sky conservation planning in North Fork Park has been a valuable tool that has helped us work toward that educational mission. As such, Assistant Professor Jeremy Bryson is committed to maintaining the necessary tools (Unihedron Sky Quality Meters) and guiding his students in the Sustainable Land Use Planning course in performing the annual monitoring of sky quality in North Fork Park.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Bryan Dorsey'.

Bryan Dorsey, PhD, Geography Department Chair

A handwritten signature in blue ink, appearing to read 'Jeremy Bryson'.

Jeremy Bryson, PhD

DEPARTMENT OF GEOGRAPHY  
WEBER STATE UNIVERSITY | 1210 UNIVERSITY CIRCLE | OGDEN UT 84408-1210  
(801) 626-6207



## North Fork Park



IDA Board of Directors  
International Dark Sky Association  
3223 N. First Avenue  
Tucson, AZ 85719

October 1, 2014

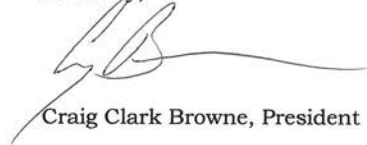
Dear Accreditation Committee Members:

As an official Collaborator in the application for accreditation of North Fork Park as an International Dark Sky Park, the OAS would like to express to the IDA appreciation for its efforts to preserve the night sky. Over the last several years in Northern Utah, we have lost, through growing light pollution, some of our long-time star party venues. To have a permanent home at the new Dark Sky Viewing Area in North Fork Park is highly significant, both to our membership and our outreach efforts.

We look forward to working with the extensive network of education partners (Division of Wildlife Resources, Wasatch Audubon Society, Ogden Nature Center, HawkWatch International, Swanson's Environmental Center, etc.) that has now been assembled to promote dark-sky education through the focus of North Fork Park and generally.

And I am personally pleased, upon my transition from President of OAS to become its IDA-liaison.

Sincerely,



Craig Clark Browne, President

## Nominators

## North Fork Park



IDA Board of Directors  
International Dark-Sky Association  
3225 North First Avenue  
Tucson, Arizona 84719

October 15, 2014

Re: Accreditation of North Fork Park as an International Dark Sky Park

Dear IDA Board of Directors:

I write this letter of nomination for accreditation of North Fork Park as Director of Weber County Parks and an active participant with the local IDA Chapter, Ogden Valley Starry Nights, and Weber State University in working to fulfill IDSP accreditation requirements.

We have incorporated into the Park's Management Plan the requirement that all exterior lighting has been in accordance with the IDA/RASC Guide to Outdoor Lighting; we have remediated all existing lighting in the Park (including that of lessee Swanson's North Fork Park Environmental Center and contractor Ogden Nordic); we have helped coordinate and publicize public dark sky events and the monitoring activities of the Weber State University teams.

Weber County is committed to this initiative with unanimous support from all three County Commissioners and the particular commitment and guidance of Commissioner Matthew G Bell.

We thank the IDA for its assistance, and we look forward to continuing to develop the marvelous resource we have at North Fork Park: an extravagantly beautiful night sky.

Sincerely,

  
Jennifer Graham, Director  
pc: Commissioner Matthew G Bell

1181 N. Fairgrounds Drive  
Ogden, Utah 84404  
Fax (801) 399-8241

  
Printed on recycled paper

## North Fork Park



IDA Board of Directors  
International Dark-Sky Association  
3225 North First Avenue  
Tucson, Arizona 84719

November 17, 2014

Re: Accreditation Application of North Fork Park as an International Dark Sky Park

To the Accreditation Committee:

Ogden Valley Starry Nights, an initiative of the Ogden Valley Growth With Excellence Mandate Committee ("GEM") became a chapter of the IDA approximately 18 months ago. Since then, we have worked toward greater awareness and enforcement of the first dark sky lighting and sign ordinances in Utah, a state which arguably could be said to have the loss of the greatest number of visitor dollars at stake if its magnificent dark skies substantially brighten. We have also undertaken the lengthy and exacting process of seeking accreditation for North Fork Park in part by expanding dark sky education through a network of education partners both in Ogden Valley and on the Wasatch Front and developing some measure of issue leadership.


We believe we now have a level of support that will make our likely endeavor to work toward accreditation for *the whole of Ogden Valley* as an International Dark Sky Community one that will accelerate our progress and might possibly set the standard for the many "Amenity West" communities, as Weber State University Professor Jeremy Bryson terms them, throughout Western America.

2 | Ogden Valley Starry Nights

We hope to be the leading edge of an effort that will spread down the Wasatch Front and have impact in all of Northern Utah.

Sincerely,

  
Kimball Wheatley (Chair, GEM Committee)

  
Janet Muir (Member, Ogden Valley Starry Nights)

  
Frank Cumberland (Member, Ogden Valley Starry Nights)

  
Steve Clarke (Member, Ogden Valley Starry Nights)



## Acknowledgements

Weber County Parks: Jennifer Graham, Jim Carter  
Weber County Planning Staff: Sean Wilkinson, Scott Mendoza, Charlie Ewart  
Representative Gage Froerer, Utah State Legislature  
Charles Wight, President, Weber State University  
Professor Stacy Palen (Physics, Weber State University)  
Professor Jeremy Bryson (Geography, Weber State University)  
Jennifer Bodine (Sustainability Specialist, Weber State University)  
Pam Kramer, Utah Division of Wildlife Resources  
Phil Douglass, Utah Division of Wildlife Resources  
Adam Brewerton, Utah Division of Wildlife Resources  
Craig Clark Browne, Ogden Astronomical Society  
GEM Committee, Kimball Wheatley, Chair  
Jane Kim, artist-in-residence, Cornell University  
Casey Grimley, official accreditation photographer

.....

### Weber State University Students

Antonya Begay  
Daniel Bush  
Devin Grigsby Collins  
Amber Corbridge  
Jaisha Gull  
Hailey Hanson  
Vincent Hanson  
Travis Lund  
Eliza Lyons  
Alexa Pierce  
Daniel Soto  
Sam Stout  
Shane Turnbow  
Tosha Wixom  
Dennis Yu

## Supporting Documents

(separate digital files accompanying this application)

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- A. Lighting and Sign Survey (initiated the current dark sky activities in Ogden Valley)
- B. Weber State University *Planning for Dark Skies* (initiated WSU's collaboration in accreditation effort)
- C. Ogden Valley Lighting Ordinance (first dark sky lighting ordinance in Utah)
- D. Ogden Valley Sign Ordinance (first dark sky sign ordinance in Utah)
- E. Media Compilation (building public awareness and support)

-

## Epilogue

“Even today the most jaded city dweller can be unexpectedly moved upon encountering  
a clear night sky studded with thousands of twinkling stars.  
When it happens to me after all these years it still takes my breath away.”

- Carl Sagan, *Pale Blue Dot: A Vision of the Human Future in Space*

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### North Fork Park

September 24, 2014 <sup>40</sup>



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<sup>40</sup> Photograph: Casey Grimley - settings: 11mm @f/2.8, 25 seconds, ISO 3200

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