

930 Custer Avenue W
Helena, MT 59620

October 18, 2011

TO: Governor's Office, Mike Volesky, Room 204, State Capitol, P.O.200801, Helena, MT 59620-0801
Environmental Quality Council, Capitol Building, Room 106, P.O Box 201704, Helena, MT 59620
Dept. Environmental Quality, Metcalf Building, P.O. Box 200901, Helena, MT 59620-0901
Montana Fish, Wildlife & Parks Director's Office, Parks Division FWP Commissioners
MT Historical Society, State Historic Preservation Office, P.O. Box 201202 Helena, MT 59620-1202
MT State Parks Association, P.O. Box 699, Billings, MT 59103
MT State Library, 1515 E. Sixth Ave., P.O. Box 201800, Helena, MT 59620
Rep. Jill Cohenour, 2610 Colt Drive, East Helena, MT 59635
Rep. Dave Gallik, 120 E Lyndale Avenue, Helena, MT 59601
Rep. Christine Kaufmann, P.O. Box 1566, Helena, MT 559624
Rep. Hal Jacobson, 4813 US Highway 12 W, Helena, MT 59601
Sen. Dave Lewis, 5871 Collins Drive, Helena, MT 59602
Sen. Duane Grimes, 4 Hole in the Wall, Clancy, MT 59634
Sen. Mike Cooney, 713 Pyrite Court, Helena, MT 59601
Sen. Ken Toole, P.O. Box 1462, Helena, MT 59624
James Jensen, Montana Environmental Information Center, P.O. Box 1184, Helena, MT 59624
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Tom Sathers, Headwaters Fish & Game Assoc., P.O. Box 1941, Bozeman, MT 59771-1941
Lewis and Clark County Commissioners, 316 North Park, Helena, MT 59601

Ladies and Gentlemen:

The enclosed Environmental Assessment (EA) has been prepared for Spring Meadow Lake State Park and the old Stedman Foundry Complex. The project includes: building a group use shelter, amphitheatre and a new nature trail at Spring Meadow Lake as well as repairing the existing trail and foot bridge. The proposed action at the Stedman Foundry Complex is to construct a Living Stream, build a trailhead connecting to the park, construct parking areas, sidewalks and drill two wells on site. Another component of the project is to build a small amphitheatre and remove the unstable Pattern House structure.

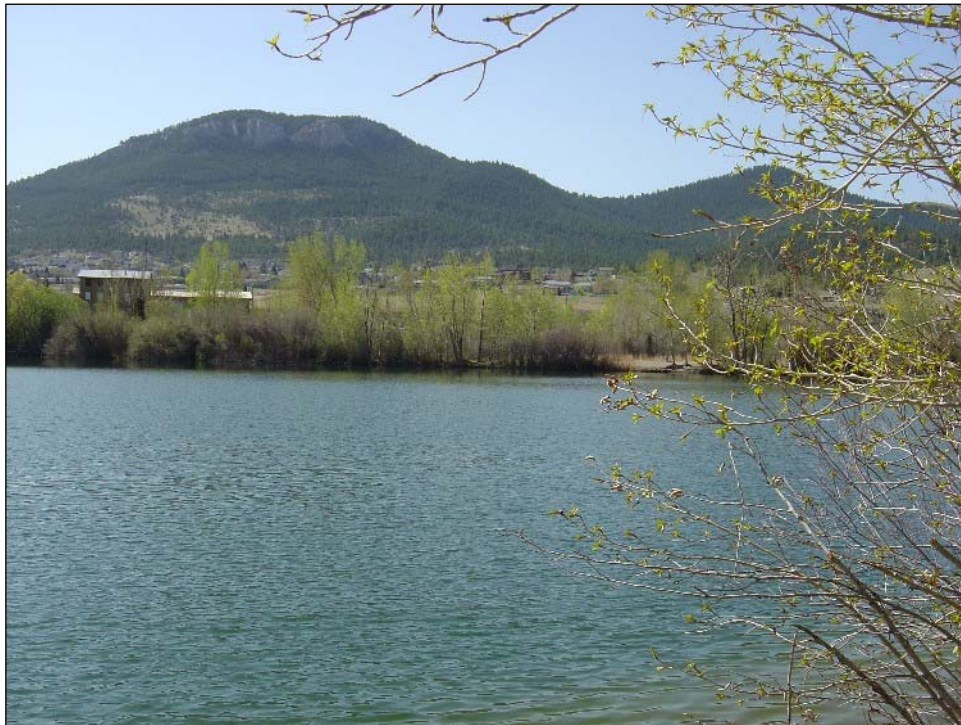
Comments will be accepted until 5:00 pm, February 28, 2005. If you have questions, feel free to contact me at 495-3260. All comments should be sent to: Montana Fish, Wildlife & Parks, Helena Area Resource Office, PO Box 200701, 930 Custer Avenue W., Helena MT 59620-0701. Thank you for your interest.

Sincerely,

Michael Korn
Helena Area Coordinator

**Draft
Environmental Assessment**

**SPRING MEADOW LAKE STATE PARK
GROUP USE AREA, TRAILS &
EDUCATION CENTER**



January, 2005



***Montana Fish,
Wildlife & Parks***

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**Spring Meadow Lake State Park
Group Use Area, Trails & Education Center
Draft Environmental Assessment
MEPA, NEPA, MCA 23-1-110 CHECKLIST**

PART I. PROPOSED ACTION DESCRIPTION

1. **Type of proposed state action:** Montana Fish, Wildlife & Parks (FWP) proposes to improve public recreation and education opportunities on the southwest end of Spring Meadow Lake State Park and proceed in phases. This action is dependent upon private funds raised and grants attained over the next 10 years as funding is available. The following actions are proposed:

Education Center Area (old Stedman Foundry Complex)

- Renovate and modify the Stedman Foundry Machine Shop for use as an education center with approaching sidewalks, entrance, and infrastructure.
- Dismantle the foundry Pattern House, retaining materials for landscaping, parking barriers, walkways, and interpretive displays on site.
- Construct curb, gutter and paved entrance and parking space for approximately 25-40 vehicles.
- Construct gravel overflow parking west of Education Center.
- Construct a Living Stream and small amphitheater. The living stream is an artificial stream that replicates a real stream in a controlled environment for educational purposes.
- Reclaim disturbed areas with native vegetation and landscaping.
- Erect interpretive outdoor displays.

Recreation Area (Spring Meadow Lake State Park)

- Pave existing gravel road south of the park entrance and parking for approximately 35 vehicles.
- Construct a group use shelter and associated swimming beach.
- Construct an amphitheatre on the west side of the park.
- Install a sealed vault latrine,
- Construct connecting trails and a trailhead from the education center to the park.
- Renovate the footbridge at the south end of the lake.
- Establish a nature trail at the southwest end of the park.
- Erect directional and interpretive signs as needed to aid public use.

(See Appendix D and E)

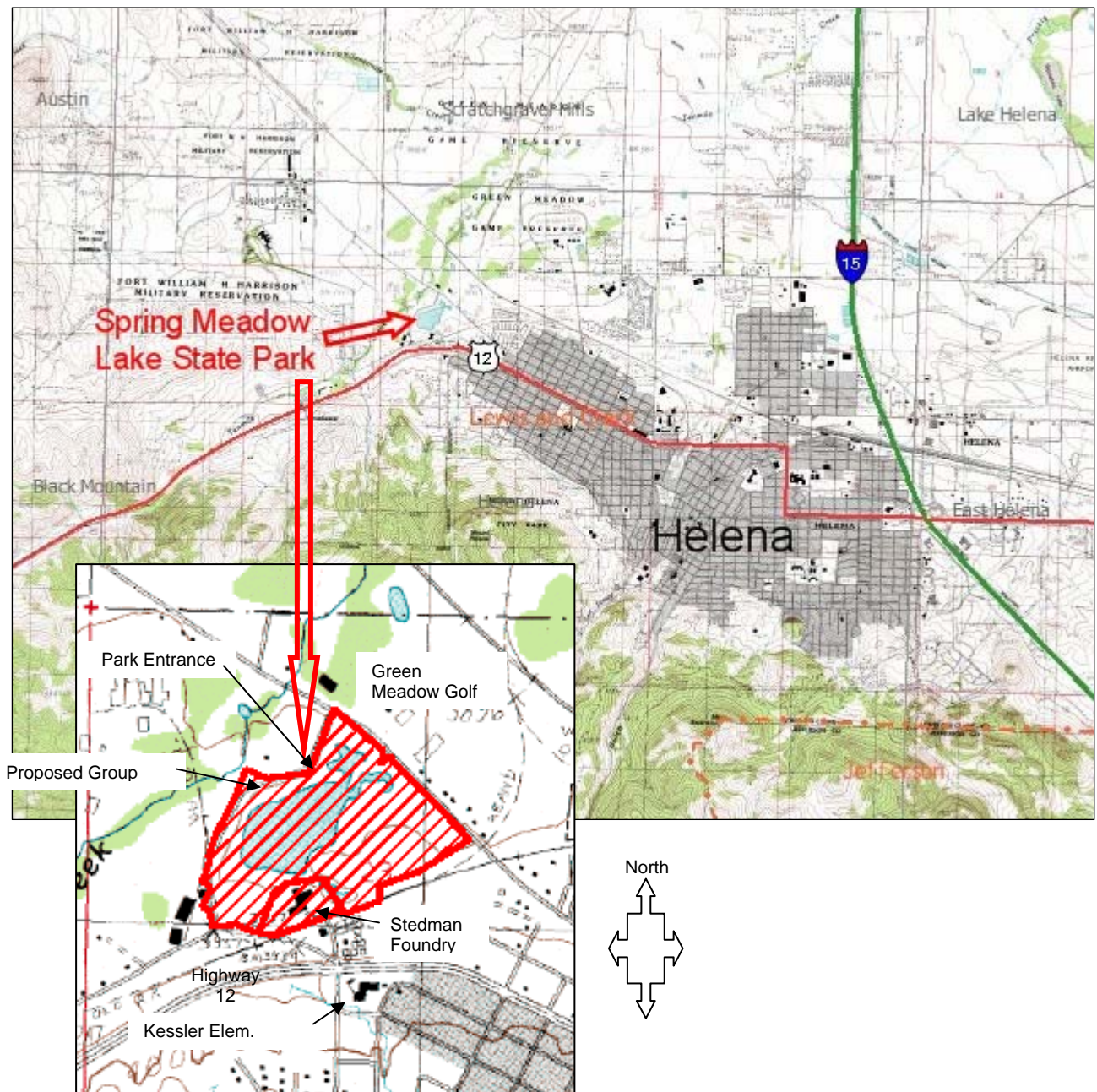
2. **Agency authority for the proposed action:** FWP is vested with the purpose and authority to conserve, plan and develop outdoor recreational resources in the state as determined in MCA 23-1-101 and 23-2-101. The opportunity for public involvement regarding the proposed park project is provided under MCA 23-1-110.
3. **Name of project:** Spring Meadow Lake Group Use Area, Trails & Education Center
4. **Name, address and phone number of project sponsor (if other than the agency):** Montana Fish, Wildlife, and Parks is the project sponsor.
5. **If applicable:**
Estimated Construction/Commencement Date: Spring 2005
Estimated Completion Date: ongoing as funds are raised

Current Status of Project Design (% complete): 25%

6. **Location affected by proposed action (county, range and township):** Spring Meadow Lake State Park is accessed by traveling west on Euclid Avenue or State Highway 12 West in Helena. Travel north about 0.8 miles on Joslyn Avenue, which veers west and becomes Country Club Avenue. The park is in Lewis and Clark County, Montana; Township 10 North, Range 4 West, Section 23; elevation 3,918 feet; total park size is 61 acres.

The south side of the lake and the Education Center can be reached by continuing west on Highway 12 (Euclid Avenue) in Helena to 2650 Euclid Avenue.

Map showing location of Spring Meadow Lake State Park on northwest edge of Helena.



7. Project size -- estimate the number of acres that would be directly affected that are currently:

	<u>Acres</u>		<u>Acres</u>
(a) Developed:		(d) Floodplain	<u>0</u>
Residential			
Industrial	<u>5</u>	(e) Productive:	
(b) Open Space/Woodlands/Recreation	<u>15</u>	Irrigated cropland	<u>0</u>
		Dry cropland	<u>0</u>
(c) Wetlands/Riparian Areas	<u>5</u>	Forestry	<u>0</u>
		Rangeland	<u>0</u>
		Other	<u>0</u>

8. Listing of any other Local, State or Federal agency that has overlapping or additional jurisdiction.

(a) Permits:

<u>Agency Name</u>	<u>Permit</u>
Lewis & Clark County	storm water discharge return permit
U.S. Corps of Engineers	404 fill permit
Department of Environmental Quality	318 temporary water quality permit
Department of Natural Resources & Conservation	water resources

(b) Funding:

Existing Funding Sources - Consulting/Design Education Center Stabilization & Rehabilitation

<u>Agency Name</u>	<u>Funding Amount</u>
FWP Fire Insurance Reimbursement	\$464,000
FWP License Funds	<u>\$100,000</u>
Total	\$564,000

Potential Future Funding Sources - Capital Development

<u>Agency Name</u>	<u>Funding Amount</u>
Parks Earned Revenue funds - group use area	\$ 200,000
private funds - educational center, grounds, amphitheater	\$ 3,000,000
private funds – Rehab or stabilization of Pattern House	\$ Unknown
Total	\$3,200,000+

Potential Future Funding Needs & Sources - Operations and Maintenance

<u>Agency Name</u>	<u>Funding Amount</u>	
FWP License - Education Center building initial staffing & operations (spending authority would be requested from the 2005 Legislature for use in fiscal years 2006 & 2007)	FY 2006	\$57,157
	FY 2007	\$108,645
FWP Foundation- Development of Living Stream		\$400,000
FWP License - Living Stream operations/maintenance		\$4000
FWP License - Education center grounds maintenance		\$4000
FWP Parks Earned Revenue - maintenance of new park facilities		\$10,000

(c) Other Overlapping or Additional Jurisdictional Responsibilities:

<u>Agency Name</u>	<u>Type of Responsibility</u>
State Historic Preservation Office	cultural resource protection
Department of Environmental Quality	soil decontamination
Department of Natural Resources and Conservation	water resources

9. Narrative summary of the proposed action or project including the benefits and purpose of the proposed action:

Montana Fish, Wildlife & Parks (FWP) proposes to improve public recreation and education opportunities on the southwest end of Spring Meadow Lake State Park. The project will be dependent upon private funds raised and grants attained over the next 10 years. The improvements are consistent with the Spring Meadow Lake Nature Center and Park Master Plan established in 1997. A fire destroyed part of the foundry facilities in 2002 requiring modification of the original plan for the Education Center. Construction is dependent upon future FWP funding, private fund raising and grant writing efforts led by the FWP Foundation.

The following actions are proposed.

Education Center Area (Old Stedman Foundry Complex) (Appendix D)

- Renovate and modify the Stedman Foundry Machine Shop for use as an education center with approaching sidewalks, entrance, and infrastructure.
- Dismantle the Pattern House, retaining materials for landscaping, parking barriers, walkways, and interpretive displays on site unless a group is willing to raise the funds for stabilizing the building.
- Construct curbs, gutters and a paved entrance and parking areas for 25-40 vehicles and to allow bus access to Education Center.
- Construct a gravel overflow parking and trailhead parking west of the Education Center. Construct a Living Stream.
- Construct a small amphitheater.
- Reclaim disturbed areas with native vegetation and irrigated landscaping.
- Erect interpretive outdoor displays.

Recreation Area (Spring Meadow Lake State Park) (Appendix E)

- Establish a trailhead near the Education Center and improve existing trails to the lake allowing access for people with disabilities.
- Renovate the footbridge (approximately 75' long) at southeast end of lake.
- Pave the road (approximately 700' long) south of park entrance leading to group use area and parking for about 35 vehicles.
- Construct a group use shelter and amphitheatre.
- Install a sealed vault latrine
- Establish a group use beach area east of the pavilion.
- Establish a nature trail (about 1000' long by 8' wide) at southwest end of the park.
- Reclaim disturbed areas with native vegetation and landscaping.

Purpose of the proposed action

The purpose of the proposed Education Center is to interpret several themes to a variety of groups, including the general public, special interest groups, and an anticipated 13,000 students annually, with a maximum peak use of 1,200 visitors daily. Broad subjects will be presented through exhibits, theater presentations, trails, staffed programs and events.

The Pattern House would be dismantled for safety reasons and to provide room for other components complimenting the Education Center. Materials from this building could be used for repairs to remaining buildings, landscaping and interpretive structures.

The purpose of the group use parking, pavilion, latrine and beach improvements on the west side of the lake are to meet public demand for facilities that can be reserved. Currently this park receives about 80,000 visitors each year. It's natural features and clean water in close proximity to Helena make it a destination point for swimming, picnicking, scuba diving, fishing and non-motorized boating. People often contact FWP asking to reserve sites for group use, which cannot currently be accommodated. With this proposal, the public could make group use reservations through the FWP Helena Area Resource Office. Water and electricity would be connected to the area.

Photo 1: Group use access road looking southwest; group use shelter and latrine area on left; parking area at center and right. Photo by Sue Dalbey April 27, 2004



The nature trail is proposed to help educate people about the importance of wetlands and riparian habitat. It would be interpreted using a brochure or panels placed at strategic locations throughout the trail.

An amphitheater would be located near the Education Center to provide an outdoor, seated group area for day or evening programs. Natural terrain may be used to position seating facing north to limit distractions from the highway and residences to the south. Electricity would be brought to the amphitheater to operate audio/visual programming equipment.

Issues

Pattern House

The Stedman Foundry and Machine Company Complex was constructed in 1892 and consisted of three buildings: the southern-most Machine Shop for fabrication, the center Foundry structure, and the three-story structure for the storage of patterns to the north, known as the Pattern House. The buildings are on the National Register of Historic Places.

Photo 2: Photo looking northeast at entrance to wildlife rehabilitation center. The Trailhead to Spring Meadow Lake would be at the person in center and continues left; The three story building is the Pattern House; the building at the right of the photo is the machine shop/future education center. Note gap between buildings where the third structure was destroyed by fire in 2002.

Photo by Sue Dalbey April 27, 2004



The Pattern House portion of the Stedman Foundry is proposed for dismantling for several reasons. In its present unstable condition the structure is unsafe. A Structural Engineer consulting with FWP and the Helena Fire Department recommended that a safety buffer be established around the Pattern House because it could collapse and have a fall-out zone of approximately 120 feet, or three times the height of the building. It would be FWP's responsibility to keep the area clear of people and facilities in the event the building should collapse.

An independent study of the integrity of the Stedman Foundry structures was completed in 1995, prior to the fire, including a historic structures report, a building condition report, digitized aerial photogrammetry and measured drawings of the building complex. These reports concluded that with investment, the buildings could be suitable for new uses. It is estimated that \$350,000 would be needed to stabilize the Pattern House and an additional \$700,000 to rehabilitate the building suitable for use (FWP Design & Construction Bureau August 2004, Davidson Kuhr Architects 2004). FWP does not have the funding available to dedicate to the Pattern House, nor is it willing to expend the excess time and effort to raise the additional dollars that would be needed to renovate the building. FWP believes that the education center goals can be met using the remaining foundry machine shop.

It is anticipated that the Pattern House would be dismantled within one-year of a formal Decision Notice issuance by FWP on this Environmental Assessment. However if private funds become available to stabilize and/ or renovate the Pattern House structure prior to dismantling the building, FWP would re examine the decision to remove the building from the site.

FWP proposes to represent the historical values of the Pattern House and the building section lost in the fire through retention and rehabilitation of the existing foundry shop. Interpretation on the site could inform the public of the importance of the site, its construction, and historical use. Though this site played an important role in Helena history, it is not extremely unique or rare. A Pattern House from the same era has been renovated and is open to the public as a restaurant on the east side of Helena. If the Pattern House is dismantled the proper, necessary and legal procedures would be followed to document the structure before it is removed.

Site Management

FWP has estimated the staff and maintenance needs for the Education Center to be approximately \$108, 645 per year, which will fund 1.16 full time positions and about \$77,000 for operations. Funding would come from the FWP license account, but authority to use this must be approved by the legislature. This request will be made to the 2005 Legislature session.

The group use facilities, parking areas, trails and amphitheatres would be managed by the State Park staff with the existing budget. Access to the group use area and the park amphitheatre would be through a gated road from the main entrance to Spring Meadow Lake State Park. The road would remain closed except during authorized group use.

Trails

A trailhead would be developed at the south end of the park near the entrance to the Wildlife Center. This would provide access to people of varying levels of physical abilities to access the existing compacted surface trail around the lake.

The nature trail would be a loop trail through approximately five acres of riparian/wetlands area at the southwest end of the park. The trail would follow an existing game trail using similar material to that used on the lakeshore trail (3/8" crushed limestone and fines) and boardwalks over wet areas. The approximately 1000' long trail would connect at both ends to the existing Lakeshore Trail; the trail would be four feet wide to allow a wheelchair and pedestrians to

pass. This would provide an FWP Level 2 accessible trail and would be considered "moderately" accessible. Interpretive panels would be erected regarding various wildlife and vegetative species inhabiting riparian ecosystems.

Spring Meadow Lake does serve as a launching point and connecting route for several trails, either proposed or existing, in the greater Helena area. Lewis and Clark County and the City of Helena are currently working to implement the Helena Area Non-Motorized Trail Plan, which includes several trails connecting to Spring Meadow Lake State Park. Trails through Spring Meadow Lake provide links to downtown Helena, the County Fairgrounds, city parks, Carroll College, schools and residences.

Living Stream

The Live Stream concept is dependent upon the quantity and quality of water available and funding to maintain it. The Living Stream is an extremely useful tool in educating the public about aquatic ecosystems and the importance of water quality to our health. Use of aquatic species not found in Spring Meadow Lake or the Ten-Mile Drainage would be subject to FWP Fisheries permitting review to eliminate the potential of new species introductions. Water quality and temperatures of water entering the stream would be controlled and monitored regularly to reduce the risk of disease in the water.

Wildlife - Human Interaction

Spring Meadow Lake State Park provides an excellent context for the public to interact with nature. The trails around the park offer chances to see a variety of large and small game and non-game wildlife providing hands-on experiences in ecology. Because of the park's proximity to the city, residences and schools, it is a great location to educate large numbers of people to our natural world and means of living with wildlife. The lake provides habitat for a wide variety of aquatic species. The park allows human interaction with and promotes natural co-existence of these species; while conversely, the Wildlife Rehabilitation Center provides the opportunity to educate the public regarding human interactions with wildlife and the care for injured, sick and/or orphaned animals. In the past, the public has shown a high interest in the care of these animals and the Education Center is a means of meeting that desire while showing the need to limit human contact if these animals are to be returned to the wild. Through interpretive methods, careful site design of public parking and access routes, and non-intrusive viewing opportunities of the animals' activities, the public can learn to live with wildlife without being invasive. The site and building design focuses the public activity as far as possible from the rehabilitation center. Parking would be on the west edge of the Foundry and building entrances are proposed for the west or north sides of the machine shop. Birms and vegetation could be used to block access and visibility between humans and the animal pens.

Foundry Soil Quality

The Department of Environmental Quality conducted quality tests at the foundry site several years ago and found high levels of heavy metals (manganese, arsenic and lead) resulting from the smelting process historically used at this site. FWP has requested DEQ to make recommendations as to the reclamation necessary to proceed with the proposed Education Center, Living Stream, landscaping and amphitheater in this area to ensure public and wildlife health.

PART II. ENVIRONMENTAL REVIEW

1. Description and analysis of reasonable alternatives (including the no action alternative) to the proposed action whenever alternatives are reasonably available and prudent to consider and a discussion of how the alternatives would be implemented:

Below is a discussion of the alternatives and issues considered for the Spring Meadow Lake Nature Center and Park, the benefits and disadvantages of each action. Alternative A is the proposed alternative described above and the preferred alternative, throughout.

Certain actions would be common to each alternative discussed below, therefore, each are not discussed under individual alternatives. For example, soils would be reclaimed based on recommendations from DEQ to ensure the health of the public, wildlife and aquatic resources under all alternatives. Additional water resources for the living stream or irrigation would be attained through established permitting requirements and subject to DNRC approval. Funding would determine if portions of the project are completed simultaneously or in phases. All areas disturbed by construction would be reclaimed with native vegetation or landscaped, depending on the proximity to buildings and roadways. Construction of roads and parking areas and associated drainage would conform to state-accepted Best Management Practices (BMPs) that limit erosion, sedimentation and turbidity.

Alternative A: Preferred Alternative. Construct the Education Center, complete the recreation and education projects as proposed and dismantle the Pattern House.

This alternative would include the following components:

Education Center Area (old Stedman Foundry Complex)

- Renovate and modify the Stedman Foundry Machine Shop for use as an Education Center with approaching sidewalks, entrance, and infrastructure.
- Dismantle the Pattern House, retaining materials for landscaping, parking barriers, walkways, and interpretive displays on site.
- Construct curbs, gutters and a paved the entrance and parking areas for 25-40 vehicles and to allow bus access to Education Center.
- Construct gravel overflow parking and trailhead parking west of Education Center.
- Construct a Living Stream.
- Construct a small amphitheater.
- Reclaim disturbed areas with native vegetation and irrigated landscaping.
- Erect outdoor interpretive displays.
- Drill two wells on site to supply the Living Stream and for irrigation purposes.

Recreation Area (Spring Meadow Lake State Park)

- Establish a trailhead near Education Center and improve existing trails to the lake allowing access for people with disabilities.
- Renovate the footbridge (approximately 75' long) at southeast end of the lake.
- Pave the road (approximately 700' long) south of the park entrance leading to the group use area and parking for about 35 vehicles.
- Construct a group use shelter.
- Install a sealed vault latrine
- Establish a group use beach area east of the group use shelter.
- Establish a nature trail (about 1000' long by 4' wide) at the southwest end of park.
- Reclaim disturbed areas with native vegetation and landscaping

Pattern House

The Montana State Historic Preservation Office has recommended that this building be preserved rather than demolished because of the historic importance of the foundry to Helena. The buildings are on the National Register of Historic Places. The Stedman Foundry and Machine Company complex was constructed in 1892 and consisted of three buildings, the middle building being destroyed in the 2002 fire.

Since the fire in 2002 destroyed approximately half of the Foundry building, the plans drawn in 1997 must be modified and components prioritized. In an effort to provide the most benefit to the public with what is anticipated to be a limited construction budget, the Education Center is given top priority for completion.

The Pattern House is three stories high. Early planning efforts intended renovation with a multi-purpose room on the ground level, resource library on the second floor, and viewing tower on the top floor.

When the fire destroyed the large Foundry building, it changed the priorities for the use of the remaining buildings. With the extremely high cost of stabilizing and rehabilitating the old building, FWP would prefer to dismantle the Pattern House to allow for other components of the Education Center. Stone and other useable materials from the Pattern House could be used for area landscaping and interpretive displays on site. The remaining Machine Shop would stand as a representative of the other Foundry building architecture. Interpretive displays would inform the public about the importance of the Foundry to Helena area history.

FWP has been attempted to find a funding source to stabilize the Pattern House since 1993 and would consider retaining the Pattern House if a private group or organization came forward with the funding to stabilize the building within approximately one year. FWP would then dedicate the cost of demolition towards the stabilization efforts of the Pattern House should a private organization be able to fund the project.

Living Stream/ Wells

This alternative proposes to construct a Living Stream and drill two wells adjacent to the Wildlife Center on FWP property. The Living Stream is an artificial stream that replicates an

actual stream in a controlled environment to be used for educational purposes. The stream would be modeled after a similar successful "Live Stream" in place for several years at the Anaconda Fish Hatchery. The stream would require a clean, disease-free source of water best procured from a well.

The proposed alternative is to build a closed system by drilling a well to feed the Living Stream. Water would be pumped from the well, flow through the stream and into a cistern where it could be re circulated or used for other purposes. Water quality would be monitored and fish densities would be determined by water volume, exchange rates, and well production. Fish species in the living stream would be determined and approved by the FWP Regional Fisheries Biologist following standard protocol. It is estimated that the Living Stream will require 35 GPM or more so an additional well would be needed for the heating/ cooling system.

Trailhead / Trails

The proposed action would improve the bridge along the existing Shoreline Trail. Improvements would also be made along the trail including trailhead signs and appropriate road barriers/fencing at the south end of the park. Another component of this alternative is to construct a trailhead and improve the connecting trail between the Wildlife Center and the park.

The existing bridge is about 75' long and is in need of repair in the near future to avoid creating accessibility barriers and to provide a safe trail. Wood pilings are deteriorating and stability is declining.

The existing Lake Trail has an approximately 500' long spur leading to the current entrance of the Wildlife Rehabilitation Center, though it is not signed or obvious from either end. It is not accessible to a Level 2 or moderate level, as is the rest of the lakeshore trail. The south end of the trail is steep and a wire fence has been cut to allow access. Parking currently is available during weekday working hours when the Wildlife Center is open; otherwise, parking would be limited to about three vehicles along the entrance road shoulder which was not intended as a parking area.

Spring Meadow Lake State Park receives an estimated 80,000 visitors annually. The majority of these people use the beach area near the main park entrance. In an effort to increase recreational opportunities and spread use across various areas of this park, a Nature Trail is proposed. The trail would traverse the same course as the primitive game trail through this area. Boardwalks would connect the trail over areas that remain wet during part of the year. Interpretive signs would tie into interpretive messages throughout the park and at the Wildlife/Education Center. Riparian and wetland areas offer habitat for unique species, and a learning opportunity that can reach thousands of people.

The trail would be in close proximity to the Education Center making the trail ideal for one of many stations for large group functions. By hardening the trail and designating a route, it will help protect the remaining acreage in this corner of the park from heavy use.

Signs would help direct the use of the site and attract visitors to the designated trail rather than pioneering trails in undisturbed areas or around the Wildlife Center.

This access point could be a useful connection for pedestrians using the multitude of trails in the Helena Area Non-motorized Transportation Plan between points north and east of the park to Kessler School and Mount Helena.

Group Use Area / Amphitheatres / Vault Latrine

The proposed action would improve the entry road to about 35 parking spaces to serve the new group use shelter / latrine area. A small beach area would be developed with this alternative adjacent to the group use area. This would serve the public desiring group reservation opportunities and facilities with adequate parking and sanitation.

The entry road and parking area would utilize an existing gravel road and graded area seeded with grass many years ago. The site proposed for group use facilities is an open area west of the shoreline trail and heavily used along the lakeshore. Vegetation in these areas is primarily grasses, cottonwoods and Russian olive bushes. Large vegetation would remain as much as possible to shield the buildings from views around the lake and provide shade.

This area is heavily used already, as evidenced by compacted and trampled vegetation. The lakebed is relatively shallow here and trees on this side of the lake provide some protection from predominately west winds.

Paths would connect parking to the pavilion and latrine and existing shoreline trail and be accessible to at least the FWP established Level 2 or moderate accessibility. Paths would be compacted and a mixed aggregate with binder would be used to provide a hard surface.

The group use shelter would be an open wooden or metal structure and accommodate 50-100 people, similar to facilities built at other state parks. Electricity and water at the site would allow use of lighting, presentation equipment, small appliances and meal preparation.

The amphitheatre would be large enough to accommodate approximately 75-100 people with an open wood or metal frame.

The shoreline near the group use area would be improved for swimming. Approximately 200 linear feet of shoreline would be graded to remove grasses and small willows, then covered with clean, washed sand. Large groups of Russian olives and brush would be left to provide shade, wind, noise and visual buffer and shoreline stabilization.

Establishing a beach area here would expand visitor use along the west shore of the park, even when a group is not using the shelter. Visitors wishing to escape the crowded beaches of the main use area could walk down to use the new beach. This is a benefit to the visitor, offering a wider spectrum of use. An additional beach area would increase demand on park staff to manage visitors and maintain the site including garbage removal, facility repair, and beach clean up.

The additional sand brought in would not impact spawning or cause a loss of critical fish habitat. Due to the human activity already occurring and low quality habitat in the selected

area, wildlife would not be significantly affected, either. Construction and additional human use would displace a small number of song birds and small wildlife to other areas in the park or adjacent uninhabited lands with similar riparian habitat.

The group use facilities would be used for such activities as picnics, weddings, reunions, and educational events, as well as FWP sponsored events. Reservations would be administered by the FWP Helena Area Office in accordance to the State Parks Biennial Fee Rule. The entry road would be gated, allowing public access only for sanctioned events. An emergency exit would be provided with removable bollards in the road continuing south from the group use area. The additional proposed parking area could serve as an overflow parking area for large park events, as well as reducing the need for vehicles to park along Broadwater Avenue.

Installing a sealed vault latrine at the group use area would keep the area sanitary. This is considered necessary since the nearest restroom facility is approximately 500' from the proposed group use facility. The park restroom is farther than some people can walk or most people want to walk, resulting in a major inconvenience to drive to the restroom or unsanitary conditions resulting in the nearby vegetation. Sanitation is a critical concern given the proximity to the water, the amount of public water-based recreation that occurs at the site, and the number of people that use the park annually. In addition, a latrine will allow use of the group use shelter in the shoulder seasons when the main park restroom facility is closed due to cold weather.

An amphitheatre would be constructed near the group use shelter to provide an area to conduct on going environmental education programs and to hold special presentations and public events. A smaller outdoor amphitheatre (20-50 people) would be constructed near the Wildlife Center to provide an area for an outdoor classroom. An amphitheater constructed near the Wildlife Center would provide an opportunity for outdoor programs to large groups. An amphitheater also provides another classroom atmosphere for situations with large school groups that need to be broken up into smaller groups. Electricity to the site would allow for evening programs and the use of audio/visual equipment.

Existing state park staff would manage and maintain the new group use facilities. Group use fees would be charged to help support the added cost of electricity and maintenance of the newly developed area.

Funds for construction would come from donations and grants raised by the FWP Foundation. It is anticipated that 1.16 full time positions and approximately \$77,000 would be needed to staff and operate Wildlife Center building for a total of about \$108,645 annually. Authority to use FWP license dollars for staff, operations and maintenance would be requested from the 2005 Legislature Session. Additional funding would eventually be needed for grounds maintenance when the project is completed.

A consultant would be hired to design the group use shelter and associated features. Bids would be solicited for construction and the project overseen by FWP Design and Construction Bureau.

Alternative B: Construct the Education Center, complete recreation and education projects as proposed and work with a private organization or group to stabilize the Pattern House.

This alternative is the same as Alternative A, except that FWP would work with a private organization or group to stabilize the Pattern House within a specified timeframe if such a group were to be identified. This alternative would work towards initially stabilizing the building (approximately \$350,000) and would not address developing the building for occupation.

Alternative C: No Action

The Master Plan for Spring Meadow Lake Nature Center was finalized in 1997, after which the Animal Rehabilitation Center was completed. If no action is taken, the Master Plan would not be further implemented. The Education Center, associated parking for large buses and groups, and sidewalks would not be developed in and around the Stedman Foundry Machine shop.

If no action is taken, the time and efforts of the dozens of people involved in the planning stages and the vision for providing public education opportunities related to the FWP mission and goals would be dismissed. The public would lose a substantial opportunity for learning about wildlife, ecology, and wildlife rehabilitation.

The no action alternative would alleviate concerns of increasing public visitation in close proximity with rehabilitating wildlife. The goal of caring for wildlife at the rehabilitation center is to return them to good health and at an age that they can live naturally. If animals become accustomed to humans, there is risk that they will continue to interact with humans when released, which ultimately leads to conflict.

The lakeshore where picnic tables are located in the proposed area is heavily used. This area is very close to the main parking and visitation area, but allows for some buffer from noise and activities. No construction in this area would allow continued use by anglers and picnickers wishing for some privacy, yet close access to parking.

The public does inquire frequently during the peak summer visitation season about renting and reserving group use facilities for picnics, weddings, reunions, and other events. Park use is currently on a first-come/first serve basis for all facilities. The park receives about 80,000 visitors annually. The No Action alternative would not address the wishes of the public to have group use facilities at the park.

Park management would be less costly and labor intensive if public use is not expanded. Highway funds and parks earned revenue intended for construction could be used at other state parks, trails, or perhaps used to complete other components of the proposed project. The Wildlife Center and south side of the park are located amidst industrial businesses, such as large storage buildings and food distribution facilities. No public parking is available, nor is a park entrance/trailhead apparent to the public. The site is in full view of people leaving Helena on Highway 12 and aesthetically unpleasant with broken barbed wire fences, multiple chain link fences, utility wires, and billboards in the viewscape. Without implementing the trailhead and parking, the area will retain an unkept and vacant look, rather than a maintained, public recreation and education related atmosphere.

Access at the Wildlife Rehabilitation Center is not obvious or currently attractive to the public, nor is it obvious that this is the south end of a public state park. This can be a benefit to limit the public visitation to the Rehabilitation Center and human interaction with recovering wildlife. This site has potential, however, to serve as a valuable educational tool for thousands of people annually. In its current state, the center cannot accommodate groups in the buildings or with parking. Without a trailhead on this end of the lake, the public will be apt to make their own trails, perhaps along the old railroad tracks and around the Rehabilitation Center.

Without developing trails through the riparian/wetlands area, many species will continue to find refuge from human activity in this corner of the park, since most people typically do not deter from designated routes. Though many species can adapt to human activity, they are active at night and find protective habitat during the day. This corner of the park provides that shelter.

2. Evaluation and listing of mitigation, stipulation, or other control measures enforceable by the agency or another government agency.

The site improvements are designed to provide opportunities for public recreation and education while protecting the existing natural resources.

Disturbed areas will be reseeded and irrigated to encourage grass growth, reduce weed intrusion and reduce erosion into the lake. Areas around buildings would be landscaped and irrigated using a variety of native and hardy vegetation. Weeds would be monitored and managed under the Region 3 Noxious Weed Management Plan.

Qualified professionals would design and construct the major building projects. All projects would be monitored by the FWP Design and Construction Bureau to ensure compliance with state and city requirements, BMPs, and post construction reclamation.

DEQ would be consulted regarding the removal of soils and placement of fill dirt on the Foundry site. Soils tested on the site indicated high levels of petroleum products and may need to be removed, depending on the use of the land.

DNRC would be the regulatory agency regarding water needed for the Living Stream and would ensure that FWP has the necessary volume and rights to the water for the project.

PART III. PUBLIC PARTICIPATION

- 1. Describe the level of public involvement for this project if any, and, given the complexity and the seriousness of the environmental issues associated with the proposed action, is the level of public involvement appropriate under the circumstances?**

The public will be notified in the following manner to comment on the EA, the proposed action and alternatives:

- Two public notices in the *Helena Independent Record*, and the *Queen City News*;
- Statewide press release
- Public notice on the Fish, Wildlife & Parks web page: <http://fwp.mt.gov>
- A public meeting will be publicized and held

Copies of this Environmental Assessment will be distributed to the neighboring landowners and interested parties to ensure their knowledge of the proposed project.

This level of public notice and participation is appropriate for a project of this scope having few minor impacts, many of which can be mitigated.

- 2. Duration of comment period, if any.**

The public comment period will extend for thirty (30) days following the publication of the second legal notice in area newspapers. Written comments will be accepted until 5:00 p.m., February 28, 2005 and can be mailed to the address below:

Spring Meadow Lake State Park and Wildlife Center EA
930 Custer Avenue
Helena, MT 59620

Or e-mailed to: cmarr@state.mt.us

PART IV. ENVIRONMENTAL REVIEW CHECKLIST

Evaluation of the impacts of the Proposed Action including secondary and cumulative impacts on the Physical and Human Environment.

A. PHYSICAL ENVIRONMENT

1. <u>LAND RESOURCES</u> Will the proposed action result in:	IMPACT *				Can Impact Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
a. **Soil instability or changes in geologic substructure?		X				1a.
b. Disruption, displacement, erosion, compaction, moisture loss, or over-covering of soil, which would reduce productivity or fertility?			X		yes	1b.
c. **Destruction, covering or modification of any unique geologic or physical features?		X				1c.
d. Changes in siltation, deposition or erosion patterns that may modify the channel of a river or stream or the bed or shore of a lake?			X		yes	1d.
e. Exposure of people or property to earthquakes, landslides, ground failure, or other natural hazard?		X				
f. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Resources (attach additional pages of narrative if needed):

1a. Grading and gravel needed to improve roads and trails, utility line trenches and sealed vault latrine excavation which would be refilled, will not alter soil stability or geologic substructure. Other features, such as boardwalks, top soil for landscaping, signing, will be over-coverings, and therefore not affect geologic substructure.

The foundry site is a pre-altered site. If DEQ recommends removal of contaminated soils, a similar volume of clean fill would be replaced and compacted; therefore, the site would remain stable.

1b. Proposed road improvement, parking areas, landscaping, trails and latrine will increase disruption, displacement, compaction, and over-covering of soils. This increased hardening of the site will reduce total vegetative productivity where the group use facilities and nature trail would be constructed. If contaminated soils are removed or covered with clean fill, the overall vegetative productivity on the foundry grounds would increase. The site design would purposefully utilize land that has been disturbed in the past by foundry activities, pioneered trails, high visitor concentration, or prior roadbeds. Rock road barriers will eliminate future vehicle traffic off designated routes and potentially resulting disruption and compaction. Implementing BMPs during construction would minimize erosion in the short term during construction, with little increase in erosion in the long term. Planting a local grass seed mix in areas disrupted by construction will also mitigate impacts.

* Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or cannot be evaluated.

** Include a narrative description addressing the items identified in 12.8.604-1a (ARM).

*** Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

**** Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

1c. No unique geologic or physical features exist in the area proposed for improvements. Improved roads and parking for the group use area would occur on areas previously used for roads or railroad. The Foundry area has been altered at various times, most recently leveled after the fire in 2002. The Nature Trail would traverse the riparian/wetlands within about 5 acres, but boardwalks would allow for foot traffic without significantly altering the physical terrain or moisture patterns.

1d. Addition of sand near the group use swimming area would add a total of about 175 cubic yards of fill above and into the lake bed (200' long and about 50' wide and 6" deep). The natural and mechanical low shoreline gradient would limit potential siltation, deposition, and erosion; all fill material must be clean. Temporary erosion controls are a standard requirement during construction projects conducted by FWP contractors. Standard state construction protocols require retaining all surrounding vegetation and seeding disturbed areas after construction to help reduce runoff and subsequent erosion.

Design and construction of the Living Stream would include settling ponds or other erosion controls to limit deposition and siltation occurring if water is released into the lake.

- * Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or cannot be evaluated.
- ** Include a narrative description addressing the items identified in 12.8.604-1a (ARM).
- *** Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.
- **** Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

2. <u>AIR</u> Will the proposed action result in:	IMPACT *				Can Impact Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
a. **Emission of air pollutants or deterioration of ambient air quality? (Also see 13 (c).)			X		yes	2a.
b. Creation of objectionable odors?			X		yes	2b.
c. Alteration of air movement, moisture, or temperature patterns or any change in climate, either locally or regionally?		X				
d. Adverse effects on vegetation, including crops, due to increased emissions of pollutants?		X				
e. ***For P-R/D-J projects, will the project result in any discharge, which will conflict with federal or state air quality regs? (Also see 2a.)		X				
f. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Air Resources (attach additional pages of narrative if needed):

2a. Minor and temporary dust and vehicle emissions would be created by heavy equipment improving and constructing the Group Use entry road, parking areas, amphitheater and landscaping. Watering roads could reduce dust during construction. Paved roads and parking would eliminate dust caused by increased visitation to the group use area and Education Center.

2b. Sealed vault latrines, by their function, create minor objectionable sewer odors. The intensity of these odors is limited by the modern design and regular maintenance of the latrine: including large black vent pipe, frequent pumping and chemical deodorizer treatment.

The proposed construction is not anticipated to have other effects on air quality.

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*** Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

**** Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

3. <u>WATER</u> Will the proposed action result in:	IMPACT *				Can Impact Be Mitigated*	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
a. *Discharge into surface water or any alteration of surface water quality including but not limited to temperature, dissolved oxygen or turbidity?			X		yes	3a.
b. Changes in drainage patterns or the rate and amount of surface runoff?			X		yes	3b.
c. Alteration of the course or magnitude of floodwater or other flows?		X				3c.
d. Changes in the amount of surface water in any water body or creation of a new water body?		X				3d.
e. Exposure of people or property to water related hazards such as flooding?		X				
f. Changes in the quality of groundwater?		X				
g. Changes in the quantity of groundwater?			X		yes	3g.
h. Increase in risk of contamination of surface or groundwater?			X		yes	3h.
i. Effects on any existing water right or reservation?		X				3i.
j. Effects on other water users as a result of any alteration in surface or groundwater quality?		X				
k. Effects on other users as a result of any alteration in surface or groundwater quantity?			X		yes	3k.
l. ****For P-R/D-J, will the project affect a designated floodplain? (Also see 3c.)		x				
m. ***For P-R/D-J, will the project result in any discharge that will affect federal or state water quality regulations? (Also see 3a.)		x				
n. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Water Resources (attach additional pages of narrative if needed):

3a. Minor and temporary turbidity would occur in Spring Meadow Lake during and immediately after addition of the beach sand. However, this material must be washed and weed free sand to limit turbidity. The parking and road elements of the proposed project would not influence water quality due to drainage design, distance from the lake and surrounding vegetation to absorb runoff prior to entering the lake. Use of silt fencing or other temporary erosion control measures would further reduce potential erosion from road-related construction entering the lake should rainfall cause a runoff event. Immediately after construction, surrounding disturbed areas will be seeded with a local grass mix to expedite vegetative regrowth and reduce future erosion. Standard BMPs will be implemented to also reduce potential erosion. FWP or the consultant would consult with the

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**** Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

Department of Environmental Quality to receive a short-term water quality exemption permit prior to construction.

Water from the Living Stream may be discharged into the lake either directly or indirectly via the Turtle Ponds. This water would not adversely affect lake quality, temperature, or oxygen levels. Turbidity would be controlled at the point of entry into the lake.

3b. Paving the road and parking areas would create slightly greater amounts of surface runoff due to the hardened surfaces; however, the on-site retention systems or sheet drainage patterns into surrounding vegetation would contain this runoff and perk the water back into the soil. Drainage in the new beach area would increase slightly due to the removal of vegetation for about 200' along the shoreline; runoff events would flow directly into the lake with no barriers. The project design and implementing BMPs during construction will create drainage patterns that minimize the impacts of minor additional runoff. Reseeding disturbed areas post construction would also reduce the rate and amount of runoff.

If surface water rights are acquired from Spring Meadow Lake for the Living Stream, all water must be returned to the lake (non-consumptive use). To qualify as a non-consumptive use, water may have to be returned in underground pipe to reduce evaporative loss.

3c. The proposed project would not be in the 100-year floodplain (Flood Insurance Rate Map Panel #300038 1538C map Revised September 4, 1985). The Broadwater Avenue roadbed creates an elevated buffer from much of the Tenmile floodplain. And because the proposed improvements are of low profile and designed to contain surface runoff on-site, no negative impacts are anticipated to the floodplain of Tenmile Creek.

3d. Water for the living stream could originate from a well source, and then be discharged into Spring Meadow Lake. Overall lake levels are not anticipated to change significantly, due to ground water transfer.

3g. Water proposed for the Group Use area would be piped from the existing public water supply well on Spring Meadow Lake State Park, in the main visitation area. This well is 50' deep and supplies 150 gallons per minute (GWIC database, Montana Bureau of Mines and Geology).

Groundwater from a new well may be used to supply the Living Stream. A well supplying less than 35 gpm would likely be feasible, but may not supply enough water to operate the stream. A water recirculation system may aid in compensation for the lack of volume. This water use could be consumptive and help irrigate the area landscaping. There are many wells in the vicinity of Spring Meadow Lake.

A larger well right or water surface rights would be subject to approval by DNRC and their permitting process. The Upper Missouri River Basin is closed to consumptive water use, so all water used for the Living Stream must return to the ground or lake. Thus, impacts to the watershed and other users would be very minor.

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3h. DEQ surveyed the foundry site and found soils were contaminated with heavy metals, specifically arsenic, lead and manganese used historically in the smelting process. Prior to construction of the Living Stream and designing irrigation systems, DEQ would be consulted. To eliminate risk of groundwater contamination, soils may need to be removed prior to landscaping around the Education Center, or the stream bottom may be sealed.

3i. FWP may apply to DNRC for water rights to operate the Living Stream. If rights are granted for over 35 gpm, all water must return to the aquifer. Therefore, other rights or reservations in the area would not be significantly affected. Another alternative may be to purchase an existing water right from a nearby owner. This transaction would be entirely voluntary by the right holder and subject to terms agreed upon by both FWP and the owner.

3k. If a consumptive well right providing under 35 gpm is attained, most of this water would be used for operating the Living Stream and irrigation purposes. Continuous use of the full right may, over time, slightly lower the water supply. This use can be mitigated through a recirculation system so that water would pass through the stream more than one time before being used for irrigation or animal water supply. If a non-consumptive well right or water surface right is attained, all water must return to the aquifer, and no affects would be anticipated to other users.

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4. VEGETATION Will the proposed action result in?	IMPACT *				Can Impact Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
a. Changes in the diversity, productivity or abundance of plant species (including trees, shrubs, grass, crops, and aquatic plants)?			X		yes	4a.
b. Alteration of a plant community?			X		yes	Please see comment 4a.
c. Adverse effects on any unique, rare, threatened, or endangered species?		X				4c.
d. Reduction in acreage or productivity of any agricultural land?		X				
e. Establishment or spread of noxious weeds?			X			4e.
f. ****For P-R/D-J, will the project affect wetlands, or prime and unique farmland?			X			4f.
g. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Vegetation (attach additional pages of narrative if needed):

4a. The foundry area also is a man-made site, having been leveled and covered with gravel decades ago. This site is open with little vegetation. Proposed landscaping would add native and irrigated landscaping vegetation to the tract.

The entire park was a gravel pit prior to FWP ownership. In addition, the area proposed for the group use area parking is part of the old Broadwater Avenue. The roadway is gravel with little vegetation. The parking area was leveled and seeded with grasses many years ago. The Group Use pavilion area and latrine location would be in an open grass field. The beach area is mostly open with trampled grasses and small willows, cottonwoods or Russian olive bushes. Construction of the proposed facilities will eliminate small vegetation in these immediate areas.

The site design purposefully utilizes existing formal and pioneered roads and places features in open areas to reduce the impacts to vegetation. The shoreline and part of the parking area is void of vegetation in some areas due to high visitation. Trees and other vegetation will be removed only within the immediate path of the proposed improvements. Larger vegetation would remain intact whenever possible.

Bridge replacement on the Lakeshore Trail would remove a small amount of vegetation on either side of the bridge for construction access. Improving the Nature Trail in the southwest corner of the park will disturb about a third of one acre for construction of the 1000' long by 8' wide trail, including temporary disturbance on either side of the trail during construction. Less than one tenth of an acre (about 700') would be disturbed by placing a trail through potential wetlands. The site has not been formally surveyed, but parts of this section of animal trail is inundated with water in spring.

Boardwalks are proposed in this stretch to allow wetlands to continue functioning.

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** Include a narrative description addressing the items identified in 12.8.604-1a (ARM).

*** Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

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Natural areas disturbed by construction will be reseeded with native vegetation or hardy grasses, where appropriate, to reduce erosion.

4c. The Montana Natural Heritage Program did not find records for federally listed Threatened and Endangered plant species in the area during a search of their database. Other than the Nature Trail route, the areas proposed for construction have been completely altered through historic gravel quarry and foundry operations.

4e. If the roads are paved, the sealed and hardened surface would not allow weeds to become established. All fill material and trail surface materials must be clean and weed free. The roadsides and new construction areas would be monitored for weed growth by FWP staff and if found, treated in accordance with the FWP Region 3 Weed Management Plan and Lewis and Clark County Weed Board. This includes implementation of mechanical, biological and/or chemical means.

4f. Please refer to comment 4a., which discusses potential impacts to wetlands.

Soils mapped at the site include Meadowcreek-Fairway complex, 0 to 2 percent slopes (mapping unit 218A) and Musselshell-Crago complex, 2-8 percent slopes (mapping unit 137B) (SSURGO database <http://maps2.nris.state.mt.us/mapper/MapWindow.asp?Profile=1215873&Cmd=Build+Reports&Zfact=2&pZoom=129&DRGQuads=DOQ&Click.x=321&Click.y=170>). The Soil Data Mart does list Meadowcreek-Fairway complex as prime farmland if irrigated and the Musselshell-Crago complex as farmland of local importance (<http://soildatamart.nrcs.usda.gov/Report.aspx?Survey=MT630&UseState=MT>). Though building new facilities on these lands would eliminate future use as farmland, the park is designated for recreational use in perpetuity. The current value of this land as prime farmland is questionable due to the urban setting of the park and private buildings surrounding the site.

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** Include a narrative description addressing the items identified in 12.8.604-1a (ARM).

*** Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

**** Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

** 5. FISH/WILDLIFE Will the proposed action result in:	IMPACT *				Can Impact Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
a. Deterioration of critical fish or wildlife habitat?		X				
b. Changes in the diversity or abundance of game animals or bird species?			X		yes	5b.
c. Changes in the diversity or abundance of nongame species?			X		yes	See comment 5b.
d. Introduction of new species into an area?			X		yes	5d.
e. Creation of a barrier to the migration or movement of animals?		X				
f. Adverse effects on any unique, rare, threatened, or endangered species?		X				5f.
g. Increase in conditions that stress wildlife populations or limit abundance (including harassment, legal or illegal harvest or other human activity)?		X				See comment 5b.
h. ****For P-R/D-J, will the project be performed in any area in which T&E species are present, and will the project affect any T&E species or their habitat? (Also see 5f.)		X				
i. ***For P-R/D-J, will the project introduce or export any species not presently or historically occurring in the receiving location? (Also see 5d.)		NA				
j. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Fish and Wildlife (attach additional pages of narrative if needed):

FWP Region 4 Fisheries Biologist Steve Dalbey stated that Spring Meadow Lake holds several game fish species, including large mouth bass, rainbow trout, yellow perch, and hatchery-reared westslope cutthroat, in addition to the non-game species pumpkinseed, long nose suckers and white suckers. The proposed construction project would slightly alter the shoreline of Spring Meadow Lake where sand is proposed for group use beach improvements. As mitigation for this change in lake bed and shoreline vegetation, it is suggested that fish habitat be improved along other banks with such things as large tree/stump structures secured the water. This would provide shelter and spawning habitat for perch and pumpkinseed.

Design of the site's drainage patterns according to BMPs would limit sediment entering the lake from newly hardened surfaces. Mr. Dalbey does not anticipate stressing impacts to the lake fisheries due to the proposed paving of roads and parking areas at the group use area or the education center (personal communication November 4, 2004).

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** Include a narrative description addressing the items identified in 12.8.604-1a (ARM).

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Stream design and species introduced to the living stream would be subject to FWP Fisheries permitting review to avoid conflicts of species management in Spring Meadow Lake and the Tenmile drainage. Water quality, dissolved oxygen levels, and disease monitoring, location of water extraction and return would also be monitored by FWP Fisheries to avoid conditions that would affect species in the lake and greater drainage.

FWP Wildlife Biologist Gayle Joslin indicated that the areas proposed for the group use area and education center do not, provide critical wildlife habitat. White-tailed deer pass through the area and there is limited pocket habitat for small mammals or reptiles. Existing human activity, past land activities and resulting lack of vegetation, limit the habitat value of these sites. The group use project would expand human disturbance beyond the current high use area and begins to encroach on areas used for wildlife security. And if the south end becomes a major access to the park, humans would further impose on wildlife habitat from the southeast.

Ms. Joslin stated that the proposed Nature Trail through the approximately five acres of riparian/wetland habitat would fragment protective habitat. Boardwalks would reduce the impacts on wetland areas, but widening the trail and promoting human access would displace some of the deer, waterfowl, song birds, and reptiles that use this area. Joslyn recommends a trail around the circumference of the riparian area with dead end spurs penetrating the vegetation at natural openings for overlooks into the habitat (personal communication November 4, 2004).

A data search request was made to the Natural Heritage Program for Threatened and Endangered Species in the area; none were identified. Ms. Joslin confirmed that no species of state or federal concern are known to inhabit the area of the park proposed for construction.

5b. Though the site does not harbor rare or unique animals, Spring Meadow Lake State Park is a major destination point for the public because of the wildlife that is often viewed. As previously discussed, as human activity is promoted further into the park from the Group Use Area and from the south, and with the addition of a formal Nature Trail, wildlife would be condensed into a smaller habitat area. Large group use would tend to overflow to the south west corner from both the group use area and the education center. Some wildlife may leave the area for at least the four summer months of high visitation. The proximity of the park to adjacent undeveloped lands, such as to the west at the Spring Meadow Resources, would allow deer and larger wildlife to find shelter there in the busy summer months and return in the shoulder and winter seasons. Allowing only day use would provide continued relief to wildlife at night. Using the existing path for the nature trail and boardwalks would help keep the public on this trail due to the density of vegetation off the trail. This would provide small pockets of secure habitat for small animals.

5d. The Living Stream display would be subject to FWP Fisheries review, which typically does not allow the introduction of new species to a drainage. New species may be housed in the Education Center building in aquariums, which isolate them from introduction into the wild

5f. Ms. Joslin confirmed that no species of state or federal concern are known to inhabit the area of the park proposed for construction.

* Include a narrative explanation under Part III describing the scope and level of impact. If the impact is unknown, explain why the unknown impact has not or cannot be evaluated.

** Include a narrative description addressing the items identified in 12.8.604-1a (ARM).

*** Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

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B. HUMAN ENVIRONMENT

6. <u>NOISE/ELECTRICAL EFFECTS</u> Will the proposed action result in:	IMPACT *				Can Impact Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
a. Increases in existing noise levels?			X		yes	6a.
b. Exposure of people to severe or nuisance noise levels?		X				
c. Creation of electrostatic or electromagnetic effects that could be detrimental to human health or property?		X				
d. Interference with radio or television reception and operation?		X				
e. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Noise/Electrical Effects (attach additional pages of narrative if needed):

6a. Daytime noise levels would increase for several months over the course of the years when crews use equipment to complete the group use shelter area, nature trail, and education center facilities. Since projects will be completed in phases as funds are allocated and private donations acquired, construction could occur during parts of several years.

The Education Center is intended to service large groups, and thus minor noise would increase in this area. Effects of these groups would be mitigated by having groups in side the building and in small groups outside. In addition, landscaping with trees would aid in dissipating noise.

Noise created by groups at the pavilion would be somewhat contained under the roof. Noise levels would increase slightly at the new beach area and carry across the lake to other areas of the park. Retaining as much large vegetation as possible would also help buffer noise.

Intermittent vehicle noise would slightly increase in the western edge of the park. The effects of this noise would be limited by gating that route, except during approved group use activities.

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** Include a narrative description addressing the items identified in 12.8.604-1a (ARM).

*** Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

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7. <u>LAND USE</u> Will the proposed action result in:	IMPACT *				Can Impact Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
a. Alteration of or interference with the productivity or profitability of the existing land use of an area?			X positive			7a.
b. Conflicted with a designated natural area or area of unusual scientific or educational importance?			X		yes	7b.
c. Conflict with any existing land use whose presence would constrain or potentially prohibit the proposed action?		X				
d. Adverse effects on or relocation of residences?			X			7d.
e. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Land Use (attach additional pages of narrative if needed):

7a. The Foundry site is currently not used to its potential due to the instability of the Pattern House, contaminated soils and lack of development funds. This assessment initiates the process by which decisions can be made based on the physical and human impacts. Upon completion of the MEPA process, improvements to the Foundry site can be completed according to the alternative selected, thus contribute to the community and state educational value.

Completion of the Group Use Area, as proposed, would contribute to the usability of this portion of the park, as well. The improved section of road and parking area would utilize a closed section of the county road now lying dormant.

7b. Though no formal designations are associated with the Spring Meadow Lake State Park Natural Areas, trail developments proposed within the riparian/wetland area do slightly conflict with general department policy of protecting wetlands. The effects of the proposed action are limited due to the small total construction area (less than one-tenth of an acre). In addition, the trail would not be highly visited for about 8 months out of the year; peak park visitation is from Labor Day to Memorial Day.

7d. No adverse effects are anticipated to nearby residents. The closest resident to be affected would be at the park entrance, just north of the proposed group use area. A new parking area is proposed near a metal shop building and the residence about 200' further north. Use will be focused south of the road, toward the lake, where facilities and paths are located. Brush lining the roadway and a metal shop will shield passing cars, parking areas and human activity from the residence. In addition, the pavilion is about 10 feet lower in elevation than the roadway, which will help buffer visual and noise effects.

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** Include a narrative description addressing the items identified in 12.8.604-1a (ARM).

*** Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.

**** Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

8. RISK/HEALTH HAZARDS Will the proposed action result in:	IMPACT *				Can Impact Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
a. Risk of an explosion or release of hazardous substances (including, but not limited to oil, pesticides, chemicals, or radiation) in the event of an accident or other forms of disruption?			X		yes	8a.
b. Affect an existing emergency response or emergency evacuation plan, or create a need for a new plan?			X positive			8b.
c. Creation of any human health hazard or potential hazard?			X positive			8c.
d. ***For P-R/D-J, will any chemical toxicants be used? (Also see 8a)			X			See comment 8a.
e. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Risk/Health Hazards (attach additional pages of narrative if needed):

8a. Paving the roads and parking areas would present a temporary and minor risk of spilling petroleum products used in the construction process. Because construction would be completed by experienced professionals, this risk is very low. In addition, the project would be monitored by FWP Design and Construction staff.

Chemical spray is part of FWP weed management, incorporated into a total program that also included biological and mechanical weed control techniques. Weed treatment would be conducted only by trained and personnel licensed under guidelines in the FWP Region 3 Weed Management Plan.

Consultation with DEQ would provide recommendations on ways to remediate soils on the Foundry site so as to greatly reduce the risk of spreading heavy metals.

8b. Paving and the associated painted lines to identify parking and travel routes would help emergency vehicle access or evacuation. Travel routes would be less likely to be blocked with the establishments of clearly identified parking areas for both the group use area and the education center. Broadwater Avenue is a closed road; however, FWP has agreed with the county to leave this road accessible for emergency access. The road to the Group Use Area would improve access for a portion of the road. Removable bollards would be placed at the end of the group use parking area and gates at either end would remain in place to allow access when necessary.

8c. Paving the Foundry parking area, landscaping the open gravel areas and paving the road and parking area to the group use are would reduce dust levels, which would benefit people with breathing difficulties. Implementing recommendations from DEQ to treat the contaminated soils

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would reduce the risk of human or animal contact with heavy metals. Removing the Pattern House would eliminate the risk of that building collapsing during an earthquake.

9. <u>COMMUNITY IMPACT</u> Will the proposed action result in:	IMPACT *				Can Impact Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
a. Alteration of the location, distribution, density, or growth rate of the human population of an area?			X		yes	9a.
b. Alteration of the social structure of a community?			X			9b.
c. Alteration of the level or distribution of employment or community or personal income?			X positive			9c.
d. Changes in industrial or commercial activity?			X positive			9d.
e. Increased traffic hazards or effects on existing transportation facilities or patterns of movement of people and goods?			X		yes	9e.
f. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Community Impact (attach additional pages of narrative if needed):

9a. Creation of the Group Use Area would intermittently increase the density of visitors in this location. Given the proximity to Helena, residential expansion in the area, the visitation at this park, and adjacent golf course, this is not expected to greatly change the social structure of the community or cause the relocation of residents.

Development of the Education Center would intermittently increase the density of people at the foundry site. This effect will be managed with overall site design, organized parking and the versatility of the site; large groups can be broken into smaller groups to use various sections of the site and much of the educational opportunities would be inside the machine shop.

The trail head at the south end of the lake would also slightly increase the population at this end of the park. This would usually be individuals or several people, but not large numbers.

9b. The group use would be an addendum to the main park, which receives groups and high visitation during the summer months. The group use area would receive similar annual visitation trends.

This commercial and industrial neighborhood to the south of the park would receive an influx of visitors looking for recreational and educational opportunities.

9c. Once the Education Center is completed, about 1.16 full time equivalents (FTE) will be needed to manage the center, maintain and operate the facilities. The park may require additional staff time to maintain the group use facilities, amphitheater and new trail.

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9d. Temporary and sporadic construction related employment opportunities will be available as funds are acquired to complete the Education Center, grounds, trails, Group Use Area, amphitheater and Living Stream.

9e. Traffic patterns would be improved if the roads are paved, due to the clear guidance of curbs, painted lanes and delineated parking. Signage will aid drivers in access to the Group Use Area and the Education Center. There may be additional traffic at the intersection of the park entrance and the road to the group use area and it could become congested when a group function is leaving late in the day during peak visitation season. A “yield” or “stop” sign may be necessary at this intersection. Similarly, traffic leaving the Education Center and entering Highway 12 could become congested after groups disperse, however recent upgrades to the Highway will ease access.

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- ** Include a narrative description addressing the items identified in 12.8.604-1a (ARM).
- *** Determine whether the described impact may result and respond on the checklist. Describe any minor or potentially significant impacts.
- **** Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

10. <u>PUBLIC SERVICES/TAXES/UTILITIES</u> Will the proposed action result in:	IMPACT *				Can Impact Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
a. Will the proposed action have an effect upon or result in a need for new or altered governmental services in any of the following areas: fire or police protection, schools, parks/recreational facilities, roads or other public maintenance, water supply, sewer or septic systems, solid waste disposal, health, or other governmental services? If any, specify: <i>parks facilities, water supply, sewer disposal, solid waste disposal</i>			X			10a.
b. Will the proposed action have an effect upon the local or state tax base and revenues?		X				10b.
c. Will the proposed action result in a need for new facilities or substantial alterations of any of the following utilities: electric power, natural gas, other fuel supply or distribution systems, or communications?		X				10c.
d. Will the proposed action result in increased use of any energy source?		X				
e. **Define projected revenue sources						10e.
f. **Define projected maintenance costs.						10f.
g. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Public Services/Taxes/Utilities (attach additional pages of narrative if needed):

10a. Paving the roads would limit county and FWP staff time spent on grading maintenance. Some FWP staff or contracted personnel would still be needed for line painting as needed, and periodic chip sealing.

Adding more improved trail distance would increase the annual maintenance required to keep brush from encroaching over the path and maintenance to ensure the trails are accessible at the desired level. The beach, new latrine, pavilion and amphitheater would all require additional routine maintenance. The latrine would be pumped by a private contractor and disposed of in the Lewis and Clark County sewage treatment plant. Trash would be collected by park staff, then removed to the county solid waste station by private contractor. Park staff would maintain these added facilities. HARO staff would be needed to aid in the administration of reservation requests.

Water to the group use area would come from wells in the park. Use would be limited to a spigot or sink. Water at the Education Center building for restrooms and potable uses would be connected to the city water system. Water source for the living stream would be a well or the lake. FWP would be responsible for the electricity costs to run heating and water pumping and purifying systems.

10b. State parks are exempt from state and county taxes.

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10c. The new Education Building will have electric and gas available for heating and lighting systems, but no new facilities are anticipated to provide these services.

10e. No revenue would be collected as a result of the proposed paving project. Due to legislation passed in 2003, Montana resident park visitors do not pay a daily entrance fee to the park. However, out-of-state visitors are required to pay such a fee. At this time, the Education Center is not anticipating the need to charge an entrance fee.

10f. No short-term maintenance would be required on the paved roads. The roads would require chip-sealing and line painting one or two times over the 20-year "life expectancy" of the pavement (FWP Design and Construction).

Operations costs of the Education Center are expected to be about \$77,292 in fiscal year 2007. As more of the site design is implemented, more maintenance costs may be incurred. This funding authority would be requested from the 2005 legislature.

The park would need about \$750 annually to maintain the group use area, beach, trails, pump the latrine, pack garbage, and do weed control.

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**** Include a discussion about the issue in the EA narrative and include documentation if it will be useful.

** 11. <u>AESTHETICS/RECREATION</u> Will the proposed action result in:	IMPACT *				Can Impact Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
a. Alteration of any scenic vista or creation of an aesthetically offensive site or effect that is open to public view?			X positive			11a.
b. Alteration of the aesthetic character of a community or neighborhood?			X positive			See comment 11a.
c. **Alteration of the quality or quantity of recreational/tourism opportunities and settings? (Please see Tourism Report - pending.)			X positive			11c.
d. ***For P-R/D-J, will any designated or proposed wild or scenic rivers, trails or wilderness areas be impacted?		X				
e. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Aesthetics/Recreation (attach additional pages of narrative if needed):

Spring Meadow Lake is on the outskirts of Helena and provides quality water-based recreation experiences. The irrigated lawn and picnic shelters along the lake shore provide a park-like setting for swimming, sunbathing, and picnicking. Parking lots and new sidewalks are scheduled for completion in the near future. Spring Meadow Lake State Park is essentially an urban park, and the public expects the facilities often associated with a city park, such as a group use area. The 61 acre park is surrounded by about 40 acres of riparian and wetland habitat, as well as open grass lands. A firm aggregate trail surrounds the lake with a wooden bridge on the south end that offers an expansive view of the lake.

About 80,000 people visit the park annually. The group use area is expected to hold between 50 and 100 people. The Education Center and Foundry grounds are designed to accommodate about 1200 people at once with about 13,000 anticipated visitation annually.

The Foundry site is elevated about twenty feet above the lake with narrow views of the lake to the north between the cottonwood trees. Billboards, electric lines, fences and commercial buildings are in the foreground of Mount Helena to the south. The site is mostly barren, level gravel, except for a variety of deciduous trees planted along the entrance road and parking area several years ago when the Wildlife Rehabilitation center was moved from the Custer Avenue FWP office.

The trail around the lake is well known, however the access from the south end of the lake is not well marked or publicized. Until the new fee rule allowing free entrance for Montana residents began in 2004, the Parks Division wished to restrict access to the parks to increase fee compliance.

The Shorty Huber Loop Trail would extend from Spring Meadow Lake State Park generally east to the existing Centennial Park Trail. The Reder Subdivision Trail would extend south to Mount Helena,

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where it would connect to the LeGrande Cannon Boulevard Trail, the Broadwater Loop Trail, and Mount Helena Park Trail System. Lewis and Clark County and the City of Helena are currently working to prioritize components and will implement the Helena Area Non-Motorized Trail Plan in early 2005.

The park is not designated as a Wild or Scenic Area.

11a. If proposed plans for the education center are completed, this would give the tract a maintained and groomed park appearance in an otherwise commercial and industrial appearing area south of the park. The education center is very much in view of vehicles passing on Highway 12, Kessler School and residents south of the highway at the base of Mount Helena. Landscaping the Foundry site, including trees, would enhance the vista compared to the open gravel area seen now with chain link fences. Paving would create a more urban look and feel to this historically industrial setting.

Viewsheds from Country Club Avenue and the main park visitation area would not be altered by the proposed plan. Visitors to the park typically focus their attention toward the lake and south to Mount Helena; mature cottonwoods along the edge of the foundry would limit the visibility of changes to the foundry site.

11b. Aesthetics will be changed around the Wildlife Center and Spring Meadow Lake if the Pattern House is removed.

11c. The quality of access to the Foundry would be improved by paving the roads and increasing parking. School buses delivering student groups for the numerous educational programs at the park and the foundry would have easy access and maneuverability with a cul-de-sac turn-around area.

Access for people with disabilities would be greatly improved with designated parking areas and easy access to trails leading to park features from the south and the new nature trail.

Recreational opportunities would increase by allowing groups to separate from the general public use area in the park. In addition, the new trail would expand the walking, wildlife observation and educational opportunities within the park. Tourism opportunities would also improve due to the proximity of the education center to Highway 12 and access to the park from the south.

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12. <u>CULTURAL/HISTORICAL RESOURCES</u> Will the proposed action result in:	IMPACT *				Can Impact Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
a. **Destruction or alteration of any site, structure or object of prehistoric historic, or paleontological importance?			X		yes	12a.
b. Physical change that would affect unique cultural values?			X			
c. Effects on existing religious or sacred uses of a site or area?		X				
d. ****For P-R/D-J, will the project affect historic or cultural resources? Attach SHPO letter of clearance (pending). (Also see 12.a.)			X			See comment 12a.
e. Other:		X				

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Cultural/Historical Resources (attach additional pages of narrative if needed):

12a. Paving of roads and parking areas would occur over existing roads and graded/disturbed areas. Due to the previous alteration of these areas, there is a low likelihood that cultural properties would be effected. Trails and landscaping would also simply cover the terrain, therefore have little effect on cultural sites that may exist.

The buildings are on the National Register of Historic Places. An independent study of the integrity of the structures was completed in 1995, prior to the fire, including an historic structures report, a building condition report, digitized aerial photogrammetry and measured drawings of the building complex. These reports concluded that with investment, they could be suitable for new uses. It is estimated that \$350,000 would be needed just to stabilize the Pattern House and another \$700,000 to rehabilitate the building suitable for use (FWP Design & Construction Bureau August 2004). FWP does not have the funding available to dedicate to the Pattern House and believes that the education center goals can be met using the remaining Foundry machine shop.

In addition, FWP proposes to represent the historical values of the Pattern House and lost building section through retention and rehabilitation of the Foundry shop. Interpretation on the site can inform the public of the importance of the site, its construction, and historical use. Though this site played an important role in Helena history, it is not extremely unique or rare.

The Pattern House could present safety hazards to visitors if left in its current, unstable condition. Helena is in a seismically active area, and this building was not built to withstand earthquakes.

12b. If the Pattern House is removed, there would be a physical change to the site.

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SIGNIFICANCE CRITERIA

13. SUMMARY EVALUATION OF SIGNIFICANCE Will the proposed action, considered as a whole:	IMPACT *				Can Impact Be Mitigated *	Comment Index
	Unknown *	None	Minor *	Potentially Significant		
a. Have impacts that are individually limited, but cumulatively considerable? (A project or program may result in impacts on two or more separate resources that create a significant effect when considered together or in total.)			X			13a.
b. Involve potential risks or adverse effects, which are uncertain but extremely hazardous if they were to occur?			X		Yes	13b.
c. Potentially conflict with the substantive requirements of any local, state, or federal law, regulation, standard or formal plan?		X				13c.
d. Establish a precedent or likelihood that future actions with significant environmental impacts will be proposed?		X				
e. Generate substantial debate or controversy about the nature of the impacts that would be created?			X		yes	13e.
f. ***For P-R/D-J, is the project expected to have organized opposition or generate substantial public controversy? (Also see 13e.)		X				
g. ****For P-R/D-J, list any federal or state permits required.			X			13g.

Narrative Description and Evaluation of the Cumulative and Secondary Effects on Significance Criteria (attach additional pages of narrative if needed):

13a. Both the Group Use Area and the Education Center will service large groups of people. Together, these will serve a large segment of the community.

13b. There is a small risk of heavy metals being spread during construction. However, by implementing the recommendations of DEQ, these risks will be diminished. The DEQ may suggest that all contaminated dirt be removed, or sufficiently covered with clean top soil, or a combination of remedial efforts.

The potential of new species being introduced through the living stream is a low risk. FWP Fisheries would review the initial permit, but future Center administrators must be educated to the danger of introducing species other than those permitted and the risk of those species conflicting with existing species management if they would enter the Tenmile watershed.

13c. Water rights would be needed to supply the Living Stream. Efforts to acquire these rights would be done according to all established permitting requirements.

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13e. Minor controversy may arise concerning the interaction between humans and rehabilitating wildlife and the effects of bringing additional people to the site. The effects of additional visitation to the site could be mitigated through specifically designed landscaping and placement of other physical barriers.

The potential for new species introduction by use of the Living Stream may raise concerns due to the public policy of no new species allowed in private ponds. This concern can be alleviated if FWP agrees to only use species found in Spring Meadow Lake or the Tenmile drainage for use in the living stream.

Efforts to acquire water rights could create controversy in today's political climate and demand for water.

13g. Please refer to Part 1, Number 8a. on page 3 for a listing of permits required.

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PART V. NARRATIVE EVALUATION AND COMMENT

Agency wide, FWP has identified the following "Goal D" in the Vision Statement: Emphasize education, communication and responsible behavior to afford citizens the opportunity to better understand and participate in the decision-making processes that sustain our natural, recreational and cultural resources for future generations." The proposed project is consistent with this goal by providing a substantial educational opportunity and leading by example of water use, species management, and visitor accessibility.

Improvements to the Steadman Foundry site would expand FWP educational opportunities immensely. The ability to serve large groups of students, volunteer groups, and private citizen groups in either large conference rooms and theaters, or divide groups into smaller pods for more intimate teaching opportunities, would be available at this site, indoors and out. Key issues that FWP addresses with the public could be expressed through a wide means of interpretive displays and activities. This facility would serve not only the community of Helena and the surrounding counties, but the entire state. Because of the proximity to the Capitol complex, this education opportunity can interlock with other destination activities and draw visitors from all over Montana.

Environmentally, the presence of heavy metals on the foundry site can be mitigated and FWP would work closely with DEQ to solve these concerns prior to soil disruptions on site.

Ultimately, the environmental risks of new species being introduced to the Tenmile drainage and water quality would be of utmost importance. FWP is charged with maintaining the states fish and wildlife health, to which these issues are critical. There are several options available to interpret aquatic ecosystems. Using the living stream is proposed and offers a unique educational opportunity. Water sources must be confirmed and could range from acquiring new, non-consumptive water rights from a well or the lake, to a low gpm well using a recirculation design, or eliminating the living stream and relying on the standard aquarium indoors. Alternatives would vary in initial costs, maintenance, labor and operation costs.

The Parks and Recreation 2005 Strategic plan states that the division intends to Increase and expand educational and interpretive programs offered at State Parks. The State Parks Division would work with the Conservation Education Division to develop interpretive programs in the Education Center, on the grounds and along the new nature trail. In addition, the Parks Division is committed to contribute to the state's general economy and Montana's tourism industry in a sustainable manner. The proposed projects would contribute to tourism locally and statewide as a destination point and from spontaneous visitation due to its proximity to Highway 12. State Parks strive to exceed visitor expectations for a positive experience, including recreation and education at State Parks. The group use facility would exceed current visitors' expectations, realizing that groups currently have space to assemble at Spring Meadow Lake State Park, but a designated pavilion and beach area would provide a more intimate gathering place.

This analysis did not reveal any significant effects to the human or physical environment. The proposed paving would surface roads, parking areas and some trails already heavily

used. Additional run-off, drainage and potential water quality issues resulting in paving a parking area would be adequately managed with BMPs and surrounding vegetation to filter and percolate runoff, thereby water quality in Spring Meadow Lake and Tenmile Creek would not be altered.

Environmental impacts to the park as a result of constructing the Group Use Area, latrine, paths and beach are considered minor, given the open grasslands to be utilized, impacts currently occurring along the lakeshore from high visitation, and planned reclamation during and after construction. FWP standards require erosion controls, retaining large woody vegetation, site design to control drainage, reseeding disturbed soils, and use of clean, weed-free fill material. Replacing top soil, compaction and seeding of native grasses and woody vegetation will expedite the return of natural areas after construction and reduce the potential for weed establishment. The damage to vegetation in this area close to the main use area may be a result of visitors trying to expand recreational opportunities. The Group Use Area would allow individuals to find more secluded picnic and swimming areas when the pavilion is not being used. In addition, relocating groups to the pavilion would relieve crowded beaches in the main use area.

Paving the roads and parking areas would enhance visitor access to the site. Traffic flows would be safer with associated lines identifying traffic lanes, directional and regulation signing, and parking stalls. Air quality would improve after paving, thus addressing visitor concerns about dust in the park and around the education center.

Improving or replacing the foot bridge on the existing Shoreline Trail would ensure safety and accessibility for pedestrians for many years to come.

The new Nature Trail would increase watchable wildlife opportunities and improve the amount of trails accessible to people with disabilities. The species found at Spring Meadow Lake are common and obviously adapt to human activity in the park. However, encroaching on the south end of the lake from both the group use area and the education center with large groups of people, albeit sporadic use, there is a risk that by fragmenting this thick protective habitat with a formal trail and increased human use, wildlife would leave the area at least during the peak visitation season.

The direct, secondary and cumulative impacts of the proposed project are expected to have minor effects on the physical and human environment. The mitigation actions proposed compensates for short term and long term potential effects. Cumulatively, improvements of the Foundry site would improve the cleanliness and presentation of this commercial neighborhood. It would help draw people to this end of town and expand on the educational opportunities of the neighborhood with Kessler School just across Highway 12. The education Center and group use area would make Spring Meadow Lake State Park a multi-purpose park with a variety of recreational opportunities. The proposed projects are consistent with the principles outlined in the 1997 Spring Meadow Lake Nature Center master plan.

PART VI. EA PREPARATION

1. Based on the significance criteria evaluated in this EA, is an EIS required? (NO)

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action.

Based on an evaluation of impacts to the physical and human environment under MEPA, this environmental review revealed no significant negative impacts from the proposed action; therefore, an EIS is not necessary and an environmental assessment is the appropriate level of analysis. Additionally, the seriousness and complexity of the issues analyzed in accordance with ARM 12.2.431 makes the EA an appropriate level of review.

2. Name, title, address and phone number of the person(s) responsible for preparing the EA:

Sue Dalbey Independent Contractor Dalbey Resources LLC 926 N. Lamborn St. Helena, MT 59601 406-443-8058	Craig Marr Sp. Mdw Lk. State Park Manager FWP 930 Custer Avenue Helena, MT 59620 406-495-3270	Kurt Cunningham Education Program FWP PO Box 200701 Helena, MT 59620-0701 406-444-1267
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3. List of agencies consulted during preparation of the EA:

Montana Fish, Wildlife & Parks
Parks Division
Wildlife Division
Fisheries Division
Design & Construction Bureau
Conservation Education Division
Montana Natural Heritage Program (species of concern)
Department of Natural Resources Conservation (floodplains, water rights)
Natural Resources Conservation Service (soils)

APPENDICES

- A. MCA 23-1-110 Project Qualification Checklist
- B. Tourism Report (pending)
- C. Clearance Letter – State Historic Preservation Office (pending)
- D. Site Plan for the Education Center
- E. Site Plan for Spring Meadow Lake

file: Sp Mdw Nature Ctr Pre-Draft EA 11-04;

**APPENDIX A
23-1-110 MCA PROJECT QUALIFICATION CHECKLIST
Spring Meadow Lake State Park**

Group Use Area, Trails & Education Center

Date: November 4, 2004

Person Reviewing: Sue Dalbey, consultant
Dalbey Resources, LLC

Project Location: Spring Meadow Lake State Park is accessed by traveling west on Euclid Avenue or State Highway 12 West in Helena. Travel north about 0.8 miles on Joslyn Avenue, which veers west and becomes Country Club Avenue. The park is in Lewis and Clark County, Montana; Township 10 North, Range 4 West, Section 23; elevation 3918 feet; total park size is 61 acres.

Description of Proposed Work: Montana Fish, Wildlife & Parks (FWP) proposes to improve public recreation and education opportunities on the southwest end of Spring Meadow Lake State Park in phases, dependent upon private funds raised and grants attained in the next 10 years. The following actions are proposed.

Education Center Area

Renovate and modify the Stedman Foundry machine shop for use as an education center with approaching sidewalks, entrance, and infrastructure. Dismantle the foundry Pattern House, retaining materials for landscaping, parking barriers, walkways, and interpretive displays on site. Construct curb, gutter and paved entrance and parking space for 25-40 vehicles and to allow bus access to education center. Construct gravel overflow parking west of education center. Construct a living stream and amphitheater. Reclaim disturbed areas with native vegetation and landscaping. Erect interpretive displays outdoors.

Recreation Area

Pave existing gravel road south of park entrance and parking space for about 35 vehicles. Construct group use pavilion. Install sealed vault latrine, connecting paths and establish group use beach area east of pavilion. Establish trailhead near education center and improve existing trail to lake allowing access for people with disabilities. Renovate footbridge at south end of lake. Establish nature trail at southwest end of park. Erect directional and interpretive signs as needed to aid public use.

The following checklist is intended to be a guide for determining whether a proposed development or improvement is of enough significance to fall under 23-1-110 rules. (Please check all that apply and comment as necessary.)

- A. New roadway or trail built over undisturbed land?
Comments: New nature trail about 1000' long would follow existing narrow animal path, but trail would be about 8' wide through riparian/wetlands area. Total land disturbed would about three-tenths of an acre, of which about one-tenth on an acre would be wetlands. Boardwalk would cross wet areas.
- B. New building construction (buildings <100 sf and vault latrines exempt)?
Comments: Amphitheater would be larger than 100sf.
- C. Any excavation of 20 c.y. or greater?
Comments: Grading for roads, parking areas and trails, and beach area, amphitheater and landscaping would require cut and fill of more than 20 c.y.
- D. New parking lots built over undisturbed land or expansion of existing lot that

increases parking capacity by 25% or more?

Comments: *Parking will al be located in areas previously disturbed, graded and graveled, but designated parking will be established for about 35 vehicles near the group use area and about 40 at the education center, with the possibility of an overflow lot developed west of the education center.*

- E. Any new shoreline alteration that exceeds a double wide boat ramp or handicapped fishing station?

Comments: *Addition of about 200 linear feet of sand is proposed along the shoreline near the group use area.*

- F. Any new construction into lakes, reservoirs, or streams?

Comments: *Clean, weed-free sand would be added to the beach near the group use area. The existing trail bridge (about 75' long) is deteriorating and would be replaced.*

- G. Any new construction in an area with National Registry quality cultural artifacts (as determined by State Historical Preservation Office)?

Comments: *The Stedman Foundry is on the National Register. The machine shop would be stabilized and renovated for occupancy. The pattern house is proposed for dismantling.*

- H. Any new above ground utility lines?

Comments: *None - utilities to the group use area and amphitheater would be buried.*

- I. Any increase or decrease in campsites of 25% or more of an existing number of campsites?

Comments: *No camping is allowed at the park.*

- J. Proposed project changes the existing features or use pattern; including effects of a series of individual projects?

Comments: *The group use area will expand use and increase use in this part of the park. The nature trail will increase the use of the existing animal trail. Implementing the site design and building improvements will change the use of the Stedman Foundry from an past industrial site and presently used very little, to a highly visited education center.*

If any of the above are checked, 23-1-110 MCA rules apply to this proposed work and should be documented on the MEPA/HB495 CHECKLIST. Refer to MEPA/HB495 Cross Reference Summary for further assistance.

APPENDIX B
TOURISM REPORT - DEPARTMENT OF COMMERCE
MONTANA ENVIRONMENTAL POLICY ACT (23-1-110 MCA)

The Montana Department of Fish, Wildlife and Parks has initiated the review process as mandated by 23-1-110 MCA and the Montana Environmental Policy Act in its consideration of the project described below. As part of the review process, input and comments are being solicited. Please complete the project name and project description portions and submit this form to:

Victor Bjornberg, Tourism Development Coordinator, Travel Montana-Department of Commerce, PO Box 200533, 301 South Park, Helena, MT 59620-0533

Project Name: Spring Meadow Lake State Park Group Use Area, Trails and Education Center

Project Description: Montana Fish, Wildlife & Parks (FWP) proposes to improve public recreation and education opportunities on the southwest end of Spring Meadow Lake State Park in phases, dependent upon private funds raised and grants attained in the next 10 years. The following actions are proposed.

Education Center Area

Renovate and modify the Stedman Foundry Machine Shop for use as an education center with approaching sidewalks, entrance, and infrastructure. Dismantle the foundry Pattern House, retaining materials for landscaping, parking barriers, walkways, and interpretive displays on site. Construct curb, gutter and paved entrance and parking space for approximately 25-40 vehicles and to allow bus access to education center. Construct gravel overflow parking west of education center. Construct a living stream, and amphitheater. Reclaim disturbed areas with native vegetation and landscaping. Erect interpretive displays outdoors.

Recreation Area

Pave existing gravel road south of park entrance and parking for about 35 vehicles. Construct group use pavilion. Install sealed vault latrine, connecting paths and establish group use beach area east of pavilion. Establish trailhead near education center and improve existing trail to lake allowing access for people with disabilities. Renovate footbridge at south end of lake. Establish nature trail at southwest end of park. Erect directional and interpretive signs as needed to aid public use.

1. Would this site development project have an impact on the tourism economy?

(circle one) NO

YES

If YES, briefly describe:

The Spring Meadow Lake SP Project appears to add a number of services and resources that will add to the appeal of this facility and provide benefits to the area's tourism economy.

2. Does this impending improvement alter the quality or quantity of recreation/tourism opportunities and settings?

(circle one) NO

YES

If YES, briefly describe:

The project appears to improve both the quality & quantity of recreation/tourism opportunities and the setting.

Signature
2/93
revised 5/00 sed

Victor Bjornberg

Date 11-22-04

APPENDIX C



MONTANA HISTORICAL SOCIETY

225 North Roberts ♦ P.O. Box 201201 ♦ Helena, MT 59620-1201
♦ (406) 444-2694 ♦ FAX (406) 444-2696 ♦ www.montanahistoricalsociety.org ♦

May 14, 2001

Michael D. Horn
Design and Construction Bureau
Montana Fish, Wildlife & Parks
1420 East Sixth Avenue
P.O. Box 200701
Helena, MT 59620

RECEIVED

MAY 15 2001

DESIGN & CONSTRUCTION
DEPT OF FISH, WILDLIFE & PARKS

JUN - 7 2001

RE: Spring Meadow State Park, SHPO Project #: 2001051408

Dear Mr. Horn:

I have conducted a cultural resource file search for the project cited above and located in T10N, R4W, Section 23. Our files show that there are currently five previously recorded cultural properties within the designated search locale, and a list of these sites is enclosed. If you need more information on them you may contact the University of Montana Archaeological Records Office at (406) 243-5525. In addition to the sites our records indicate that two cultural resource inventories have been previously conducted within the search area, and a list of the reports from these inventories is also enclosed. If you wish to obtain further information on either of these documents you can contact me at the number listed below.

Due to the level of previous ground disturbance at the project location we concur with your view that the proposed improvements at Spring Meadow State Park have a low likelihood of impacting cultural sites, and therefore a cultural resource inventory is not warranted at this time. However, should cultural materials be identified during the course of the project we ask that our office be contacted and the site investigated. As indicated in your letter, we anticipate separate consultation for work proposed on the Steadman Foundry.

If you have any questions or comments please feel free to contact me at (406) 444-7767 or by e-mail at godin@state.mt.us. Thank you for consulting with us.

Sincerely,

Terrence Godin
Cultural Records Manager

Enclosures

File: FWP/PARKS/2001

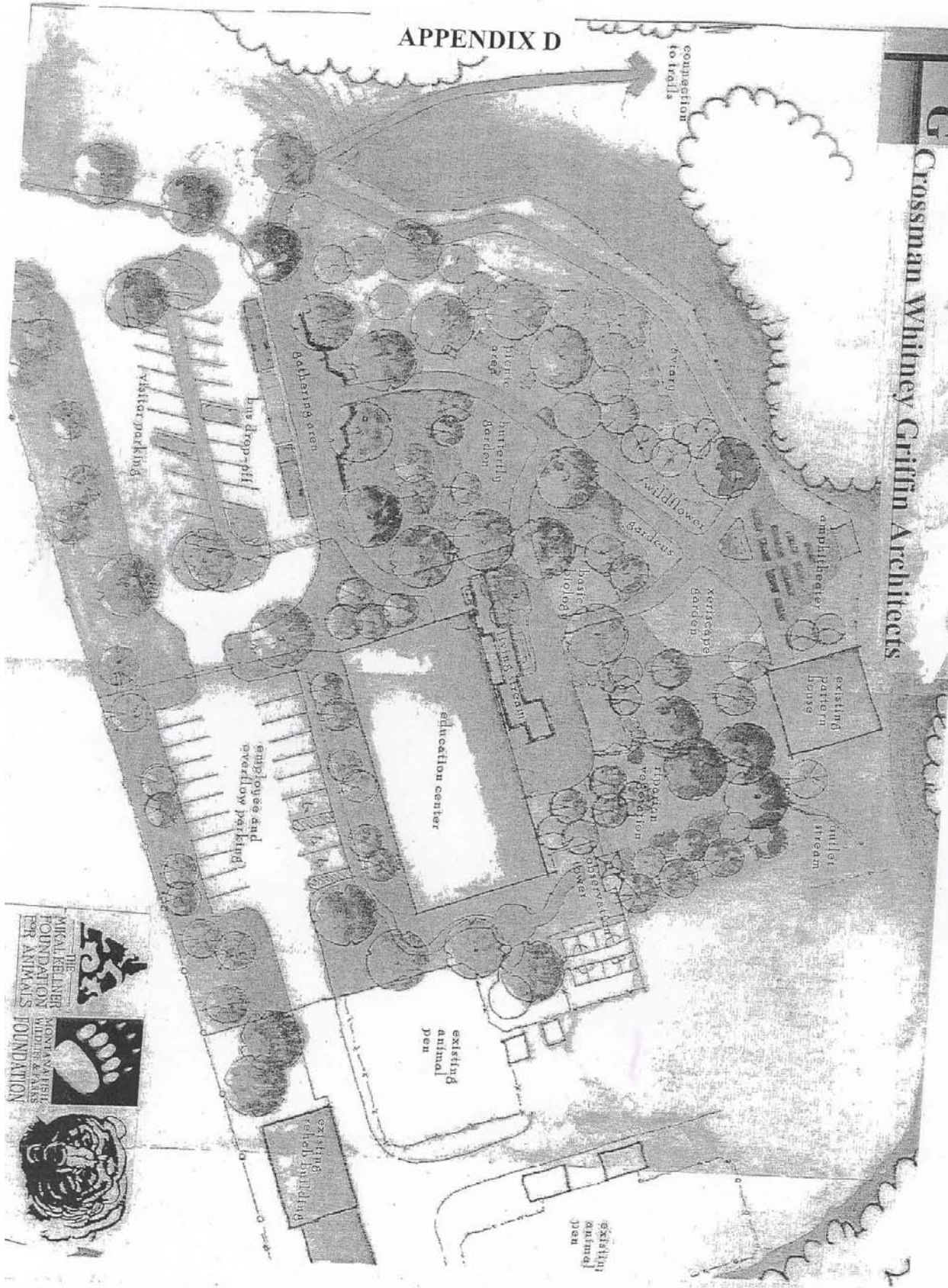


STATE HISTORIC PRESERVATION OFFICE ♦ 1410 8th Ave ♦ P.O. Box 201202 ♦ Helena, MT 59620-1202
♦ (406) 444-7715 ♦ FAX (406) 444-6575

APPENDIX D



Crossman Whitney Griffin Architects



APPENDIX E

