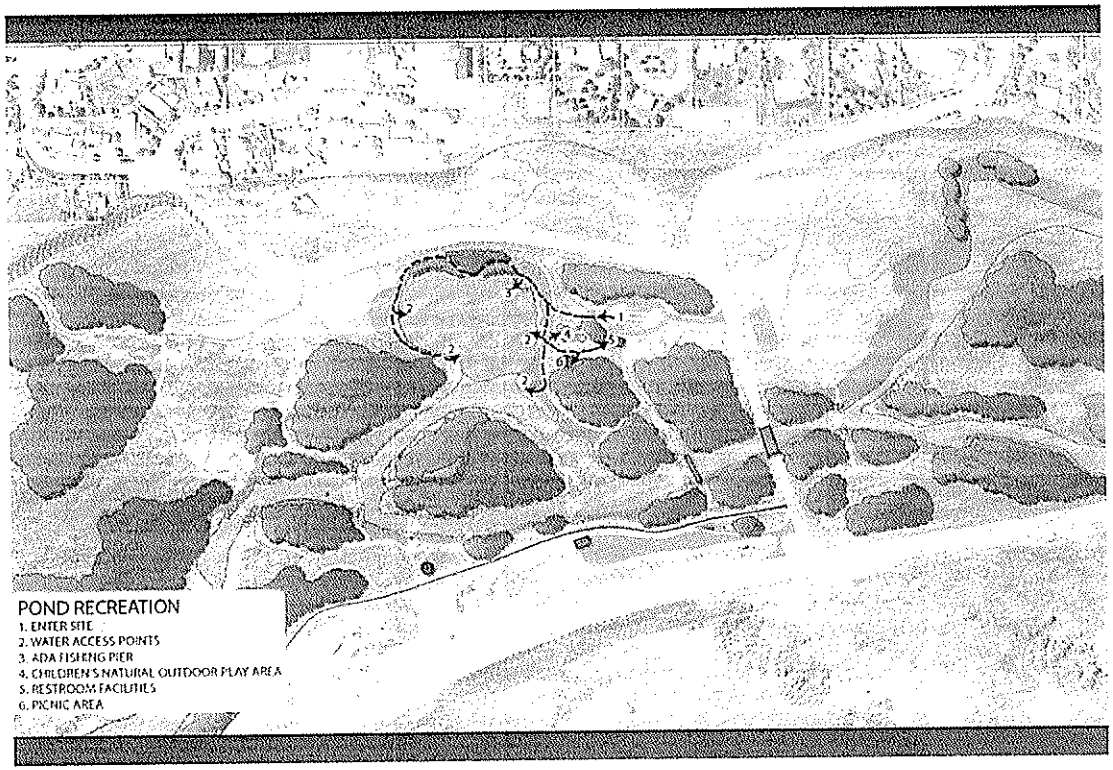
2.7 KAYAKERS

Whitewater kayakers will come to the River Park at Sun Peak with a variety of objectives and expectations. The kayakers can be loosely grouped into three general categories: Beginner/ instructional, intermediate, and expert competitor.

Beginner/Instructional: Beginner and instructional kayakers come to the site with little or no experience or expertise. These users typically have appropriate gear, often rented or borrowed, such as a life jacket and helmet but may not have the experience necessary to paddle in the park without capsizing. A upturned boat for these paddlers often results in a swim and the need to find a safe place to exit the river. An ideal design for this type of boater, and for instructional programs in general are simple and clearly defined jets of water with large eddies on both sides and a calm body of water in which to recover. Many may start in the Pond itself. It is also interesting to note that these users tend to paddle most often when the weather is warm and when flows are past peak run-off and are of manageable strength and volume.

Intermediate: The intermediate paddler, for the purposes of this discussion, spans a broad gamut of abilities from capable paddler within the whitewater park to the avid kayaker that paddles in the park to prepare for other, more challenging adventures. These paddlers arrive with their own gear and have a clear understanding of where to ingress and egress the river. For the most part these paddlers can play at will throughout the park and seldom swim. These boaters are seeking a paddling experience that includes a variety of whitewater options including surfing, eddies and eddy turns, places to gather and watch in a group, and fast shooting currents in places. These boaters paddle the full extent of the whitewater park and return to the top--or return to the parking lot--on foot by the trail provided Places need to be provided for ingress/egress and some wet exits.

Expert Competitor: The expert competitor uses the park for practice and competitions. This user is provided features in the form of surfing waves and fast shooting water in the East Channel during higher flows. The master plan design would accommodates these users and their competitive needs.



2.8 POND USERS

The pond is the centerpiece of River Park at Sun Peak and this proposed Master Plan. The pond is currently used for many activities including walking, swimming, wading, kayaking, dog walking, and fire fighting, among others.

In recent years the pond has begun to fill with sediment and the bulk of the flows of the Big Wood River have moved to the Easterly channel. This has left the pond, during low-water times, with insufficient inflow and the water becomes warm, stagnant and experiences algae blooms. The pond is highly impacted and features no wetland nor riparian zone habitat. The banks are steep and eroded from runoff and heavy traffic.

This Master Plan proposes dramatic changes to the Hulen Meadows Pond in order to enhance and preserve the existing uses and experiences. The plan includes grading and access improvements that would stabilize the pond's banks and improve access. These improvements include the inclusion of an ADA fishing pier and pond-side trail. The plan also suggests the planting of native tree species to provide shading along the banks and to separate areas that are historically used by local residents from areas that are expected to be used by other visitors. The plan also includes an enhanced pond edge design that creates areas designed for access--a place where people can swim, boat, or throw sticks for their dogs--and areas designed for riparian and wetland restoration. These areas would have underwater benches and native plantings that would thrive along the banks of the pond.

Users of the pond are expected to come from two main groups--local residents who stroll down to the park and access from the South and visitors who visit the park either up the Big Wood River Corridor Trail or come and park in the lots provided on the East side of the property. It is expected that the differing access points would provide separation for these two types of users and would preserve the existing experience for local users.

2.9 ANGLERS

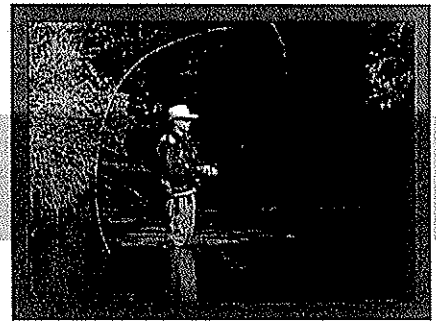
The Big Wood River provides excellent fishing with a large population of Rainbow Trout. This amenity draws locals and visitors alike to its banks to take advantage of the prolific hatches and beautiful scenery.

To promote fishing in Ketchum, River Park at Sun Peak Master Plan provides river access along the banks of the Big Wood to allow fishermen to access the river and pond in a variety of locations. The network of trails are designed to wind through the park and along the river, leading fishermen of all ages, to a variety of fishing environments including slow moving water, pools and riffles. The trails would include ADA river access points and an ADA fishing pier.

Fishermen, as with kayakers/floaters, can be divided into two classes of users: Recreationalists and enthusiasts. The recreationalists arrive with some gear and equipment but will largely be seeking out the experience of fishing. These users typically access the river at easy access points near parking areas. Often the recreationalists come as a part of a group of folks who may be pursuing other activities. Due to this users lack of knowledge and experience, signage and direction are often required.

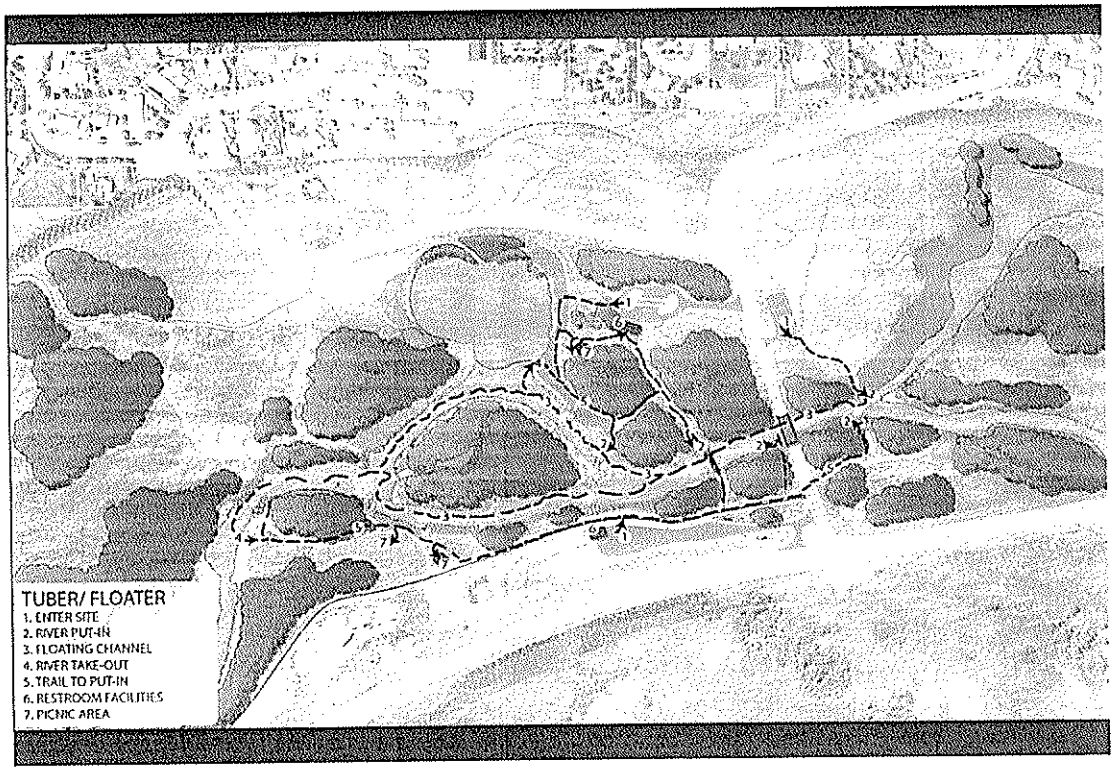
Enthusiasts are different. Enthusiasts arrive with adequate gear and experience and seek out fishing locations based on a knowledge and experience of where fish will likely congregate. Often this user prefers less populated and more rural areas to fish as a part of the experience that they are seeking. These users require little guidance and tend to seek out experiences where they are not directed by signage, fences, etc.

The Master Plan would also improve the fish habitat by creating pools, hydraulics, eddies and strategically placed rocks to increase the fish habitat and aid in fish navigation and spawning. The pond would also provide opportunities for children to learn to fish with their families as well as with fishing programs.



At the suggestion of the Wood River Land Trust the reach upstream of the bridge has been preserved in its existing condition in order to maintain the existing habitat in this area. This upper reach of the R & PP property is valued by fishermen for its quality of fishing and its natural aesthetic. Our master plan anticipates that enthusiasts will seek out this upper reach, as they do today, for fishing opportunities while the developed park area would provide areas for recreational fishermen to easily access the river and divide their time between fishing and other activities.

2.10 TUBER/ FLOATERS

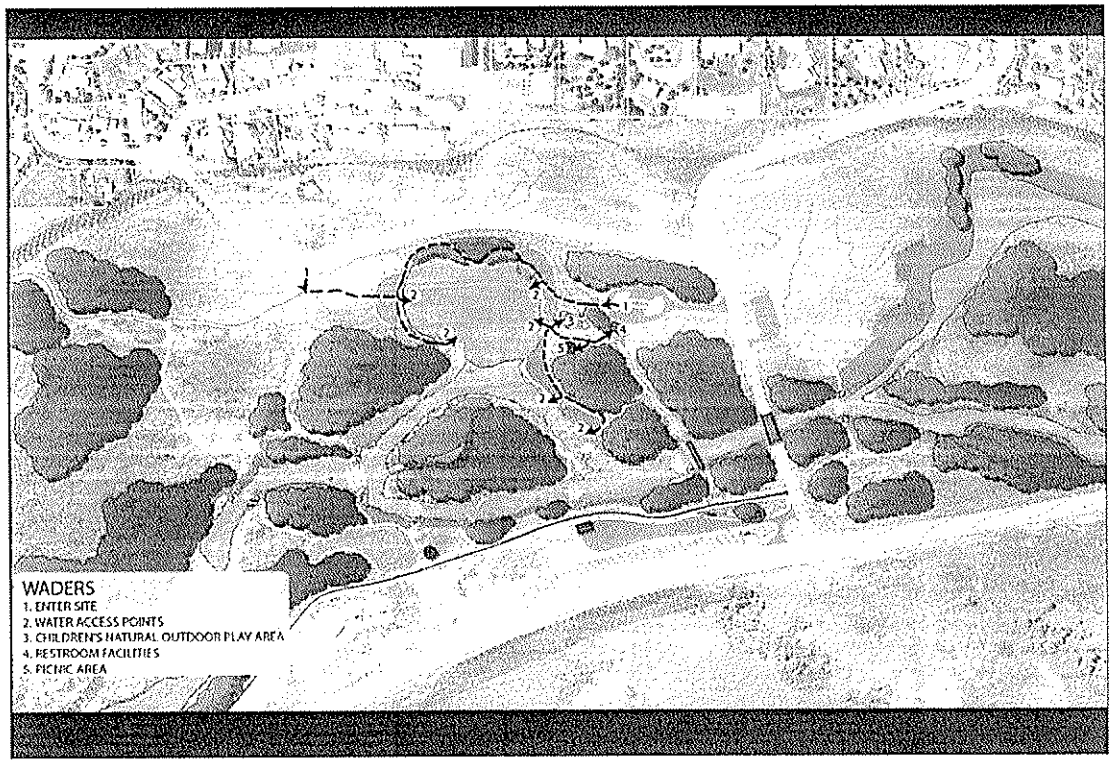


Tubing and floating can be a user group in whitewater parks and this type of user could benefit significantly from the River Park at Sun Peak. As the name implies, the Big Wood River contains many instances of woody debris. This woody debris can be beneficial to the ecosystem but can also be a navigational hazard. This debris can be a particular danger to in-stream floaters that lack the know-how, and the mobility, to avoid them. The creation of the River Park would provide a controlled and maintained environment for floaters to navigate the Big Wood River.

Floaters are typically inexperienced boaters who arrive with little or no safety equipment save the watercraft that they bring. This type of user does not understand river etiquette nor are they typically knowledgeable in river safety and rescue techniques. This type of use is not appropriate for higher flow times where the river's power, cold temperature, and speed increase the risk associated with their abilities.

The design for these users allows for multiple routes down the East and West channels of the river park. Users who choose to travel into the West Channel would have more room to recover in the calm pools prior to negotiating the final drops. This user is expected to loop upstream from the downstream end of the river park by means of the East-side trail. Parking is provided and encouraged on the East side of the river with the opportunity to route back to the river and float the section multiple times (this is typically how these users navigate the park).

Signage and river management are recommended to ensure that these users are encouraged to wear an approved flotation device and to give directions and guidance with regards to appropriate water levels as well as return routes back to the top of the Whitewater Park.



2.11 WADERS

Currently there are large depositional areas adjacent to the Hulen Meadows Pond as well as on the downstream side of the mid-stream island. Residents and visitors alike tend to wade out to these cobbled beaches to sunbathe, explore the island, and to play at the water's edge. These users tend to be low-water users who come to the site to sunbathe or play in the warmest months of the late to mid summer. Temperatures and water levels are prohibitive for this activity in the spring and early summer.

This existing usage would be impacted by the sediment management plan that is suggested in this document. The sediment management process would include the removal of the depositional materials in the pond area on an as-needed basis in order to maintain pond depth and the ability to trap sediment, as well as to mitigate flood hazards.

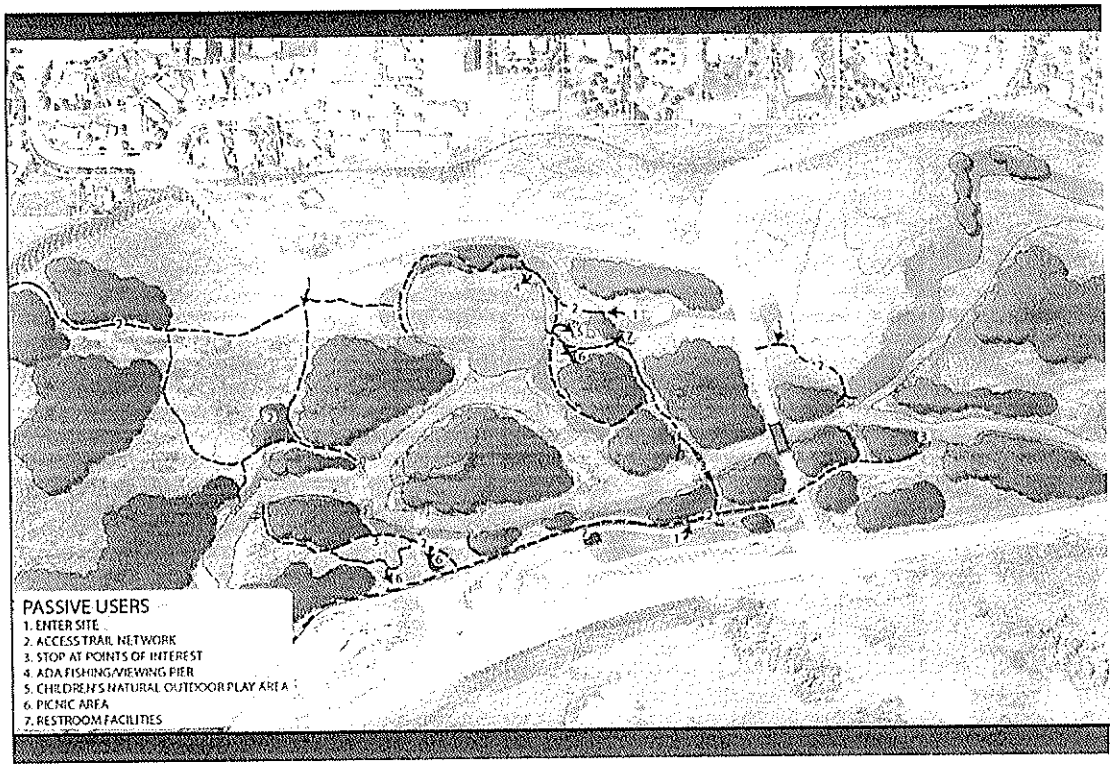
The sediment removal plan would impact the existing deposition areas and would affect the users who currently sunbathe and wade in these areas.

In order to accommodate these users the sediment removal areas are defined by hardened natural stone benches. These benches would define a pilot channel through the depositional area. The benches would define the elevation of depositional areas adjacent to Hulen Meadows Pond and to the downstream end of the island. The sediment management plan would preserve depositions in these areas at these specified elevations.

Waders are expected to access the site from the east side parking lot(s) along the main River Park at Sun Peak Pond Trail.

Waders are an existing usage and are not expected to increase the current levels of traffic through the site.

2.12 PASSIVE USERS



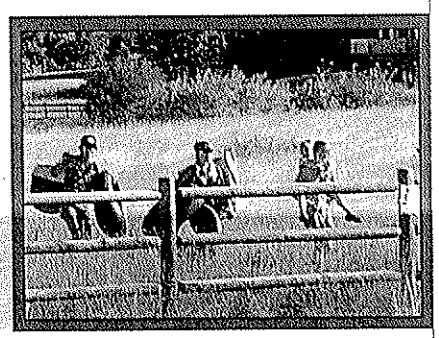
The River Park at Sun Peak would be unique to the region and an attraction for paddlers and non-paddlers alike. Ketchum is a destination town with many attractive amenities but this venue would create a unique attraction for the City. People of all ages and backgrounds would come to the venue to walk its banks, tour its trails, and visit the pond, the whitewater park, and other amenities.

These users arrive on site to explore the venue and seek out recreation and exploration activities. Typically this user is uninformed and appreciates signage that tells of the project's history, the town's history, and that explains the flora and fauna.

This user also seeks out children's play areas for family recreation, as well as paths and bridges to exercise and walk with family and friends. These users explore the river and pond's banks and typically tour the site's trails. This user typically seeks out vistas where they can see the project, the pond, the mountains, and other scenic views.

It is a primary objective of the project to tie this particular user to the City itself. Kayakers, fishermen, rafters, and other active users will come to the River Park at Sun Peaks for extended stays and will naturally gravitate to the town. The passive users may only come to view an event or to tour the site. Design of the venue should draw them to the Town of Ketchum either through signage, direct trail access, or other means..

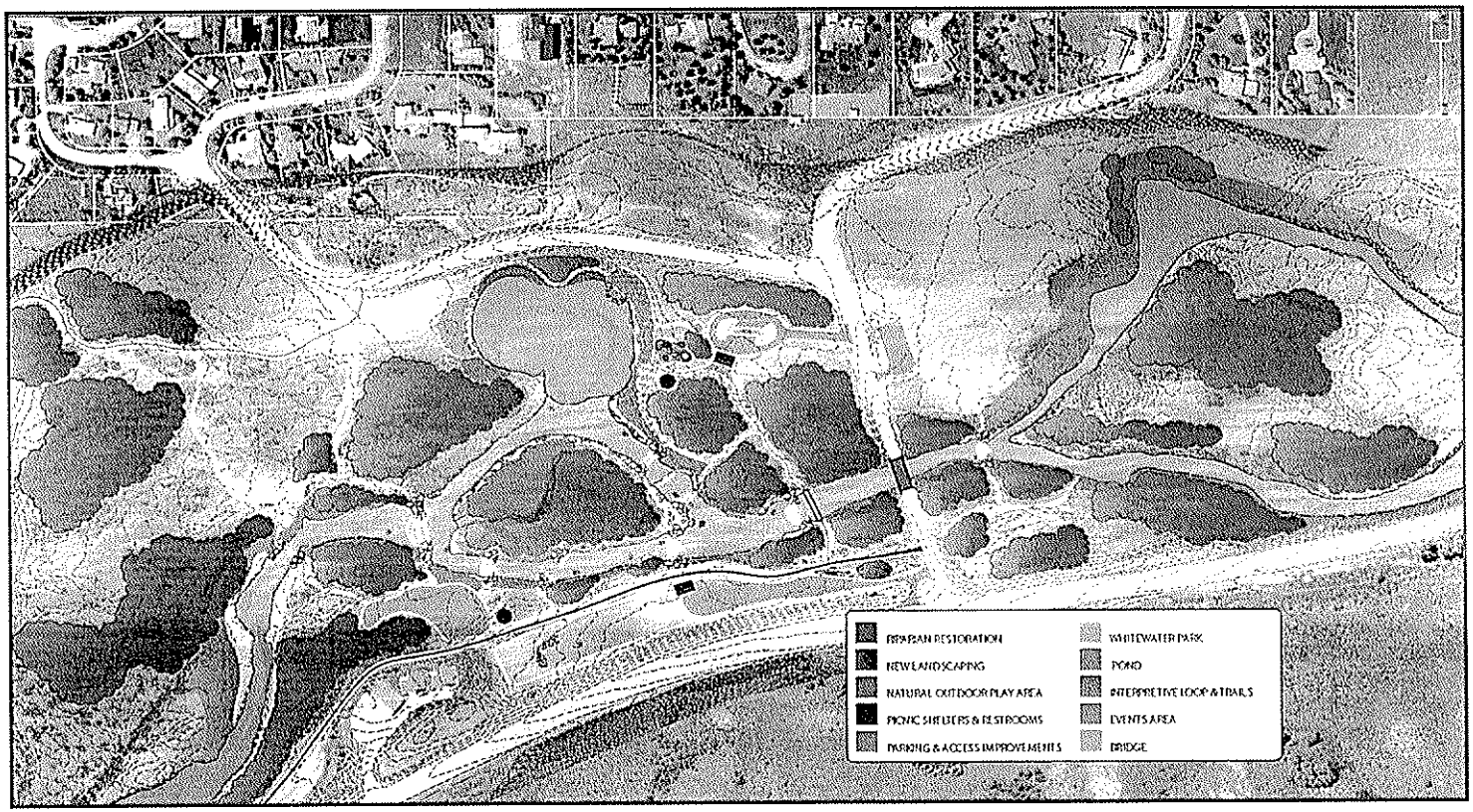
Some of these visitors will not be active by nature. Handicap access allows all types of spectators to the venue including older or physically challenged companions who will also seek the venue out as a day's outing. These users desire ramps, shaded areas to rest and access pathways that are appropriate so that they can share the experience with family and friends without limit.

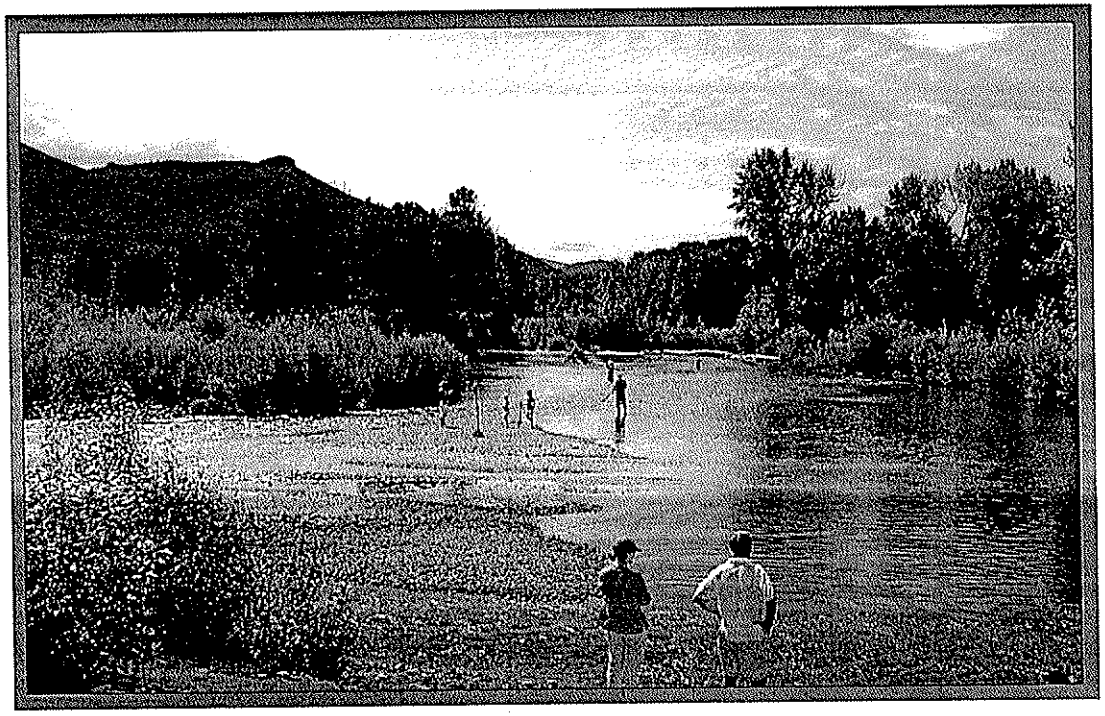


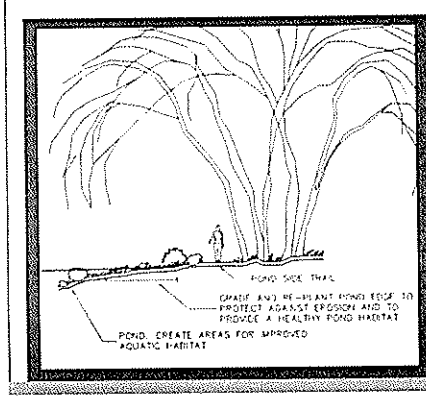
Others of these visitors will bring family and will desire an active place in which to play with their children in the outdoors and to gather with their families under cover.

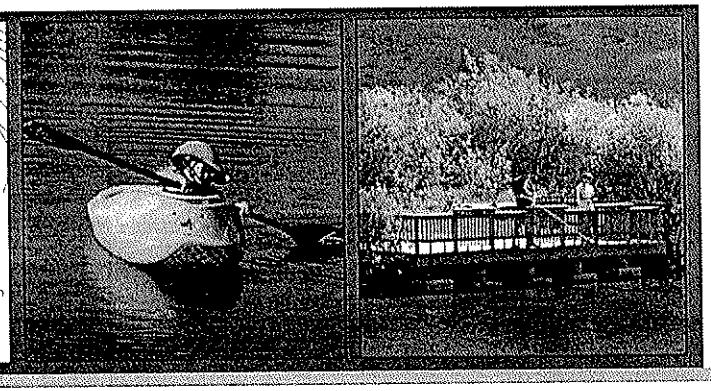
SECTION THREE: THE R & PP MASTER PLAN PROGRAM ELEMENTS

3.1 PROGRAM ELEMENTS MAP

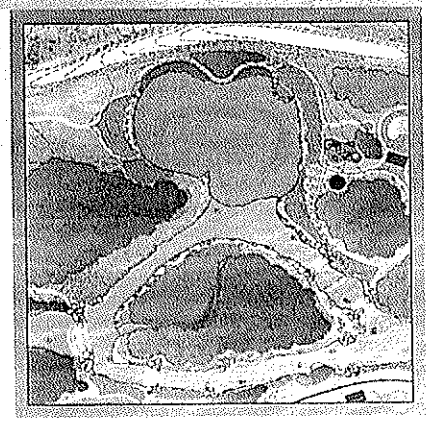








3.2 POND RESTORATION



Hulen Meadows Pond is one of the central attractions of the River Park at Sun Peaks. As noted above the pond is currently utilized by a number of user groups for a variety of reasons but has become highly impacted by this usage.

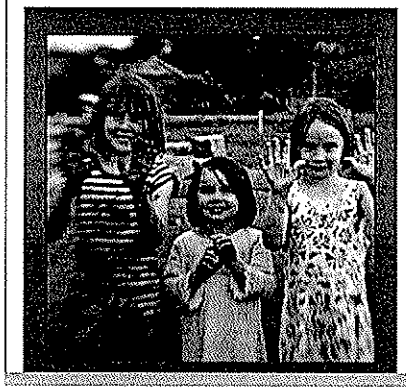
The Master Plan includes a number of improvements intended to enhance the user experience while also restoring and protecting the valuable habitat that will be planted and maintained around the pond.

The general public would access the pond from two directions: either from the primary parking on the east side of the river or from the family and accessible parking located just to the north of Hulen Meadows Pond. These users are provided with trail and ADA access to the north shore of the ponds and continue to the east along the Big Wood River or to the West along the Hulen Meadows Pond if they choose. An area of the pond edge along this northern shore of the pond would be graded back to a gentle slope and a safety bench would be created in the pond. This gently sloping access to the pond would provide a safe and attractive access for swimmers, waders, and kayakers. Rest rooms, a water fountain, a natural kids play area and a covered picnic area would also be created along this north shore.

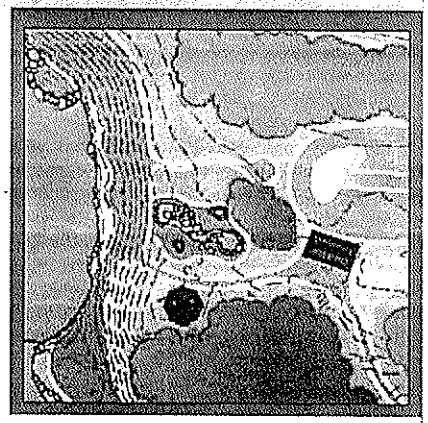
A second access has been provided to the south and east of the pond. Given the lack of available parking in this area and the direct access from the Hulen Meadows neighborhood, it is anticipated that this access would be used primarily by Hulen Meadows residents. The south shore of the pond would be graded back to a gentler slope and a safety bench would also be created on this shore to provide a gently sloping access for swimmers, waders, and kayakers on this bank as well.

A direct route has been designed to provide ADA access from the family and accessible parking to the ADA Fishing Pier. This pier would provide fishing access on the northwest shore of the Hulen Meadows Pond through a structure that is designed to safely allow family and disabled individuals to fish and view the pond.

The pond edge would be replanted and restored in select locations along the south and west shores. These plantings have been designed to create a wetland area as well as a riparian zone. The plantings are expected to provide the mutual benefits of restored habitat as well as shading and aesthetic appeal. All plantings would be with species native to the Big Wood near the river park at Sun Peaks.



3.3 NATURAL OUTDOOR PLAY AREA



The Pond area would also contain a naturally appearing children's play areas. The natural outdoor play area would focus on creating a low-maintenance child-specific play area.

The play area has been designed to cater to children's natural desire to play in the water, climb, and explore. The primary features would include a splash-depth stream that consists of potable water poured over a mini-streambed and vented to the Hulen Meadows Pond. This mini streambed wiould be made from sands and gravels with larger rocks provided that can be used to create dams , pools, and riffles.

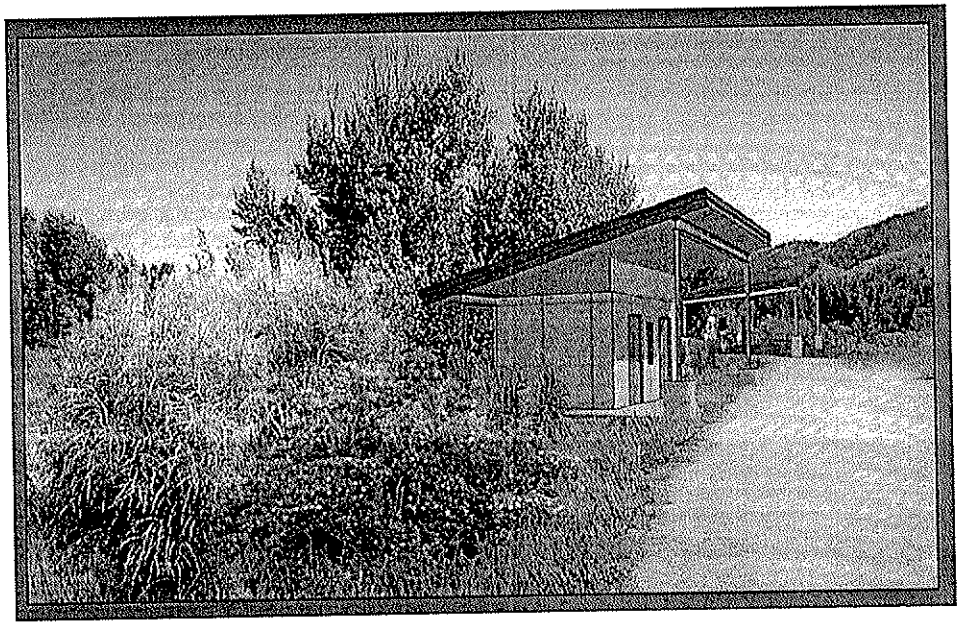
The play area would also contain children's height climbing rocks that are placed in a stable manner into the ground and surrounded by a soft-surface base.

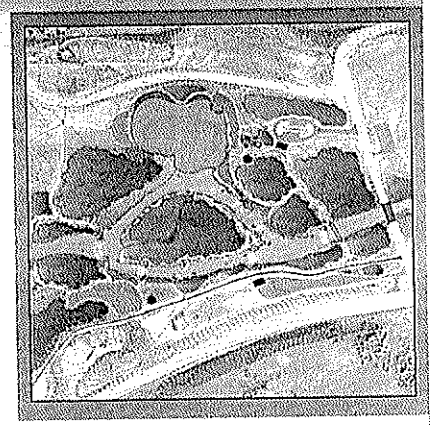
This amenity would include an interpretive element designed to encourage children to seek out natural habitats for various species and then learn about these species and their lives. These interpretive elements would be designed in partnership with the WRLT with the objective of fostering stewardship and a love for the natural environment.

The play area would contain a variety of native plants and plant material, as well as sufficient shade and sunlight, to meet the needs of the activities and seasonal changes. The play area would also have a variety of boulders for children of all ages to climb, sit, or use as props.

The Play area would be located near the restrooms, covered shade area, and water fountain such that the children would have access to necessary facilities and can be watched by family members who might be using the covered picnic area for family events and gatherings.

3.4 PICNIC SHELTER AND RESTROOMS





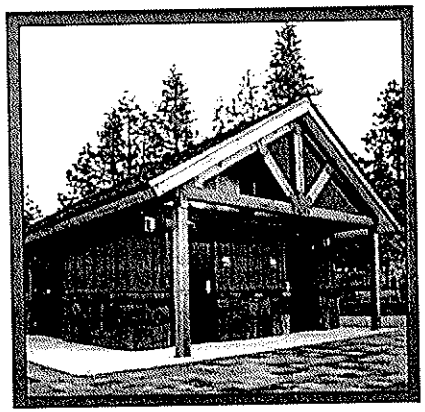
The City's R&PP application includes a covered picnic area and restroom facilities for users of the Hulen Meadows Pond. A second constraint, provided by the Hulen Meadows Neighborhood, requests that traffic, noise, and users be minimized on the west side of the project. As such, two restrooms and covered picnic areas are provided in this plan. One provides for users on the West Side and one on the East side.

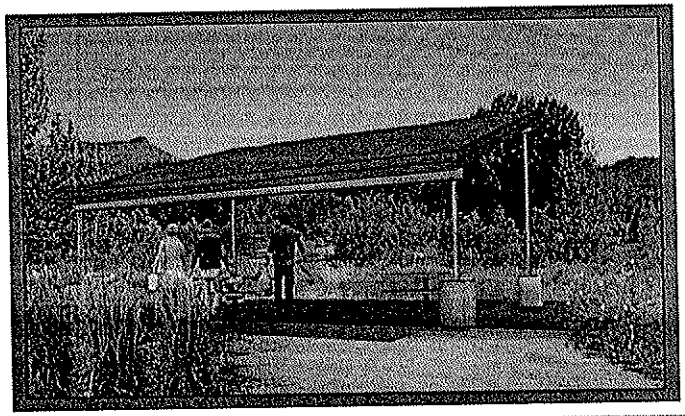
On the west side of the river, restrooms and a covered picnic area would be provided adjacent to the handicap and family parking as well as the pond and children's play area. The restrooms would be sited such that children and families that visit the pond, the children's play area, and/or the covered picnic area do not have to cross the parking or the road in order to visit the restrooms. The restrooms would be further shrouded from direct view by the Hulen Meadows neighborhood through plantings and landscape design.

The covered picnic area on the west side would be located such that families who "base" out of the covered area for picnics and shelter can cook, socialize, or relax while still monitoring the pond edge and the children's play area. This site was chosen such that those in the picnic area can contribute to on-site safety and oversight.

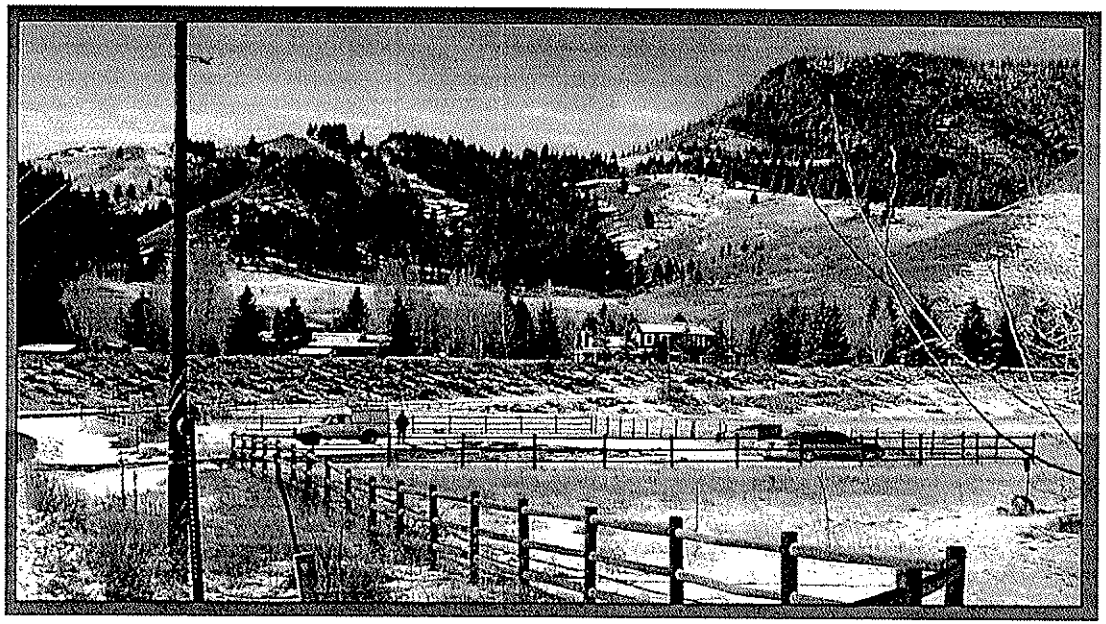
The east side picnic and restrooms would be sited in an existing meadow adjacent to the fire station. This location was chosen as it provides an area for group picnics and festivals that is far removed from the Hulen Meadows neighborhood. The site is also adjacent to water and sewer lines. The intent of creating this second picnic and restroom area was to service users of the whitewater park and east side river users. The east side gathering area would significantly reduce the need to cross the river to the Hulen Meadows Pond area.

Typical examples of restooms and picnic shelters are shown in the adjacent images. The R & PP application specifies pit-type outhouses for the restrooms but concern has been expressed by the BLM about seepage into the adjacent groundwater. Sealed outhouses could be used upon further investigation during detailed design.





3.5 PARKING AND INFRASTRUCTURE



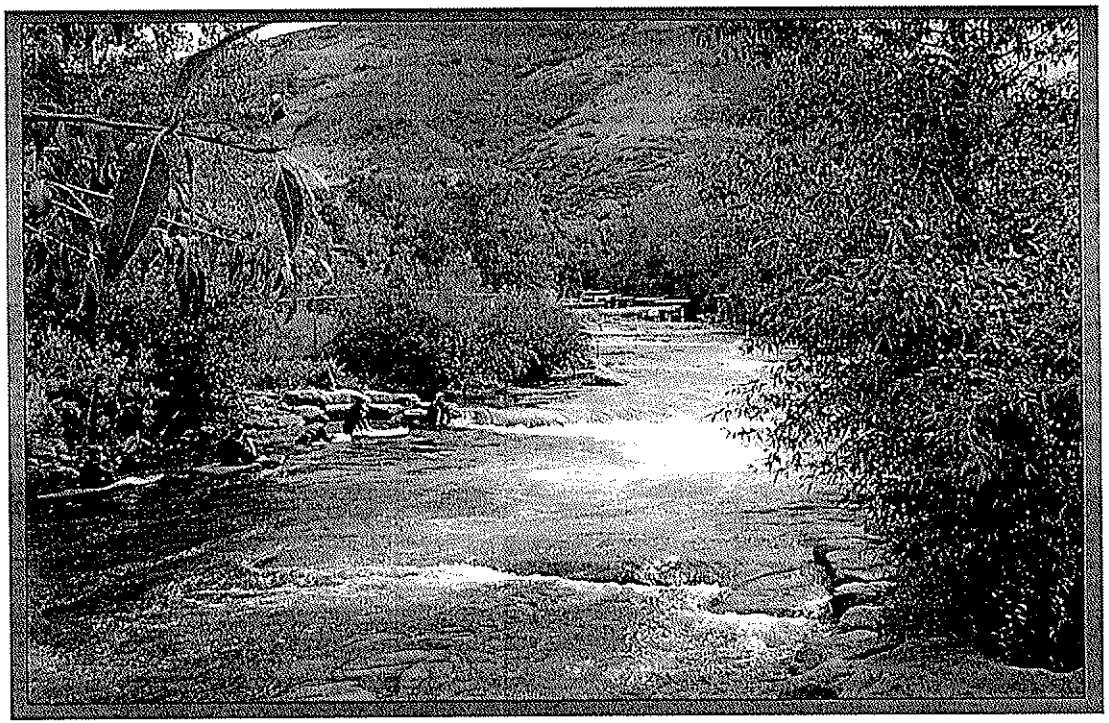
Parking would be provided at both sides of the River Park at Sun Peak. The primary parking would be located on the east side of the river and is an improvement to an existing parking area that is currently utilized by fishermen and kayakers who access the Big Wood River. This parking area would accommodate 80 to 100 vehicles on the east side of the river with room for future expansion. Signage and the design of the entryway would encourage visiting traffic to park in this lot.

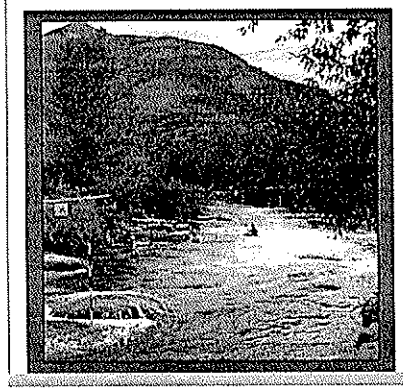
In addition, close-in parking would be provided near Hulen Meadows Pond for families and ADA access. This parking area would accommodate 25 to 35 cars including ADA parking spaces. All of the parking would be permeable surface parking.

The parking has been designed with two objectives. The first objective is to provide for parking and access on the west side. These parking areas would provide ADA access to the pond and allow for some close-in parking by visitors. By providing adequate parking, neighborhood street parking would decrease and visitors would feel welcomed to the area. The second objective is to provide and attract the bulk of the parking on the East side, to decrease the congestion and noise levels on the West side of the bridge.

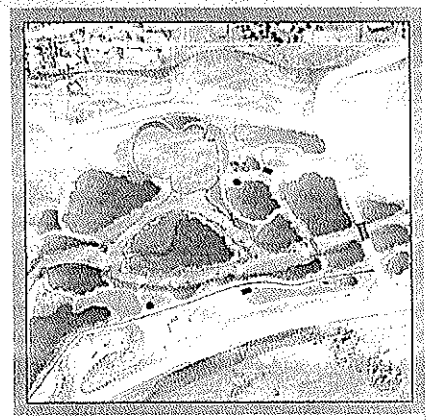
The East parking is designed to carry the brunt of the visitors as the primary site parking. Making the east parking the primary parking area has several advantages: The first is to decrease traffic on the Sage Road bridge. The second is to focus much of the additional usage and traffic on the East side of the river. The plan includes separate trail access to the river, as well as the pond, from this parking area. This parking area would also be expandable, if needed

- Permeable surface parking
- Main parking on the east side of the river.
- Pedestrian bridges
- Parking expandable for events and to adapt to usage.





3.6 WHITEWATER PARK



The restoration of existing drop structures in the reach and creation of the in-stream features of the River Park at Sun Peak is one of the primary components of the park plan. This centerpiece attraction is designed to be both naturally beautiful, through the use of materials such as local rock and native plantings, as well as a recreational attraction for many types of users.

The river features that are planned are restorations of existing structures that were built in the Big Wood River. The river features have been designed to accommodate a variety of activities from wading and sunning at lower water levels to elite level kayaking at higher water levels.

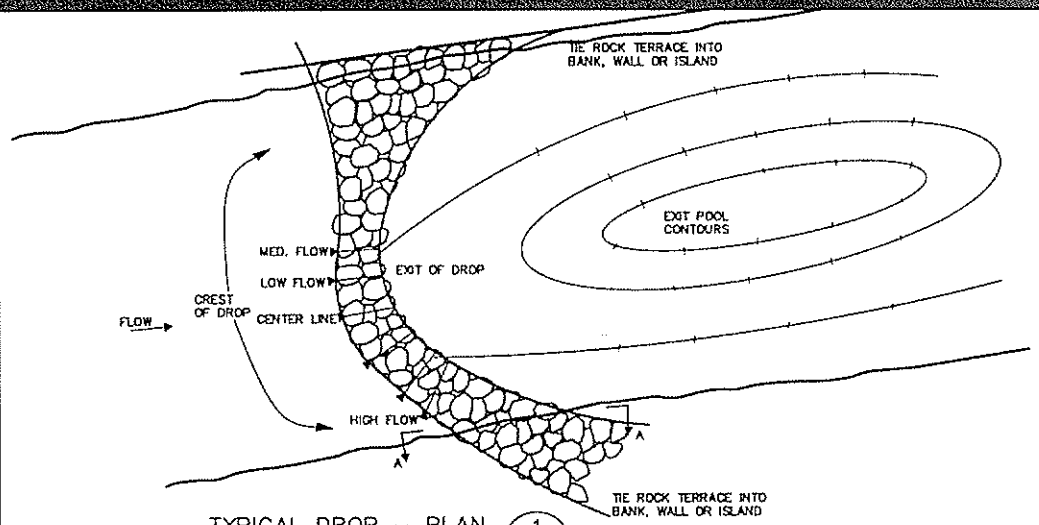
The park features two main channels and controls the amount of flow that travels through each channel at varying water levels. At lower flows the predominant amount of flow would pass through the west channel, through a low-slope reach that features some small waves and drops, past the Hulen Meadows Pond and downstream through the restored habitat areas to the junction with the west channel.

The east channel would always have some flow but would transform from the secondary channel to the primary channel at higher water levels. This channel would feature larger wave features and hydraulics at these higher flows and would be designed to cater to intermediate and elite boaters during these high flow time periods. This reach of the river features distinct drop features that would be used for freestyle, recreational boating, and some slalom type paddling. There are three additional drop structures that would use the entire flow of the river located upstream and downstream of the divided channels.

The in-stream features have been designed to provide the riffle-run-pool morphology that is beneficial to in-stream species. The scour pools created by the drop structures would provide additional deep water pool over-winter habitat which is important to the Big Wood at this location. The structures would also be designed into the current flood model of record in order to ensure that there are no negative impacts to the floodplain in the area

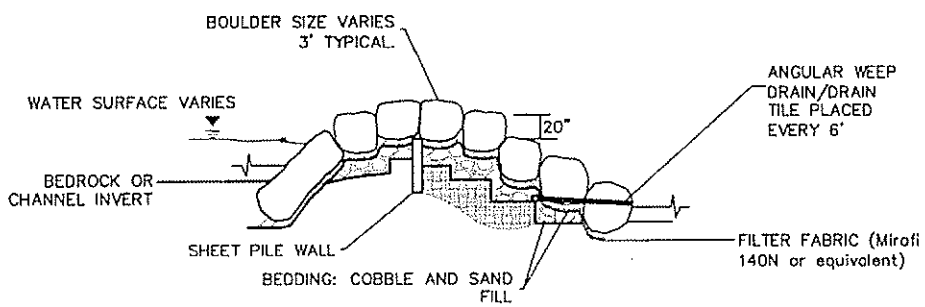
The structures planned also provided fishing access via trails and hardened bankside access points. This access would provide fishing at each of the deep scour pools as well as to wading areas at lower flows.

3.7 WHITEWATER PARK- TYPICAL DETAILS

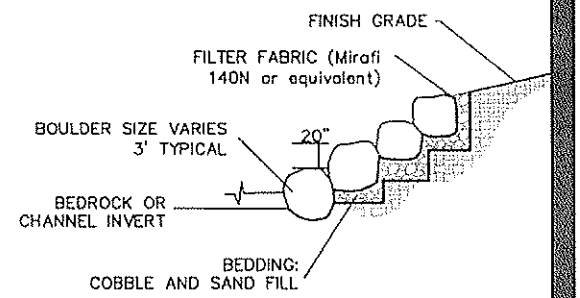


TYPICAL DROP – PLAN (1)

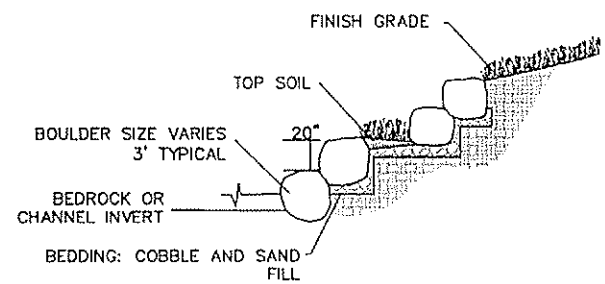
SCALE: NTS



TYPICAL WING PROFILE (A)

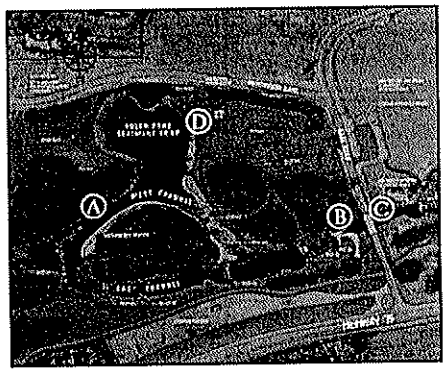


TYPICAL TERRACED ROCK (1)

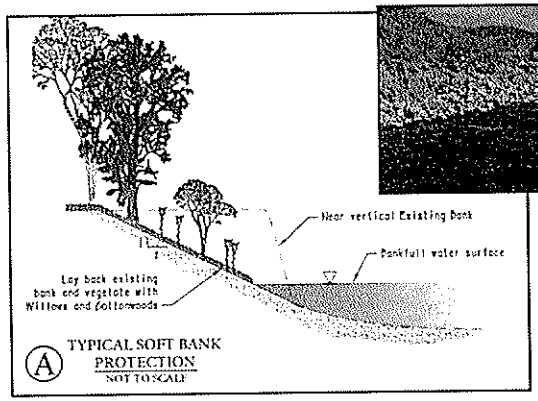


TYPICAL TERRACED ROCK– WITH PLANTING POCKET (2)

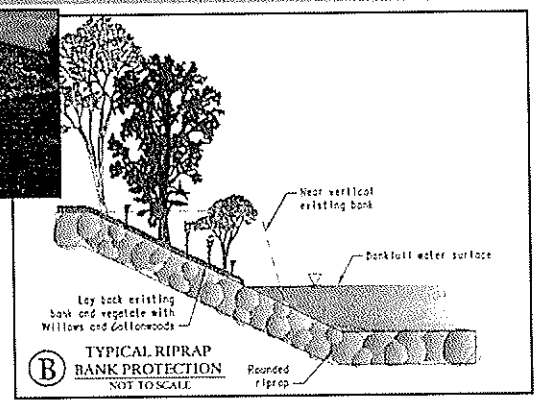
3.8 WHITEWATER PARK- BANKSIDE SECTIONS



PLAN VIEW - POND AREA
NOT TO SCALE



A TYPICAL SOFT BANK PROTECTION
NOT TO SCALE



B TYPICAL RIPRAP BANK PROTECTION
NOT TO SCALE

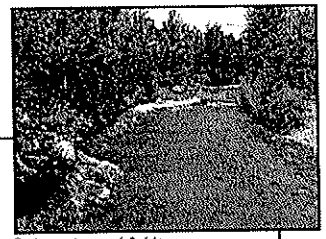
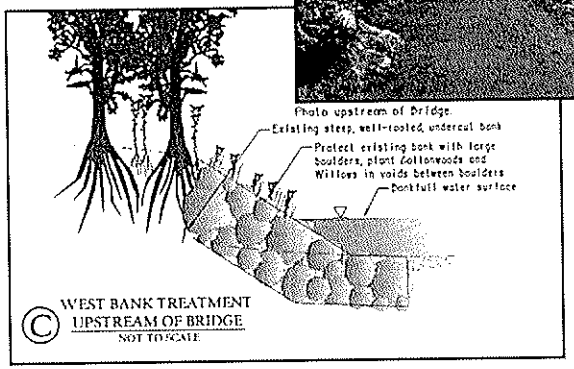
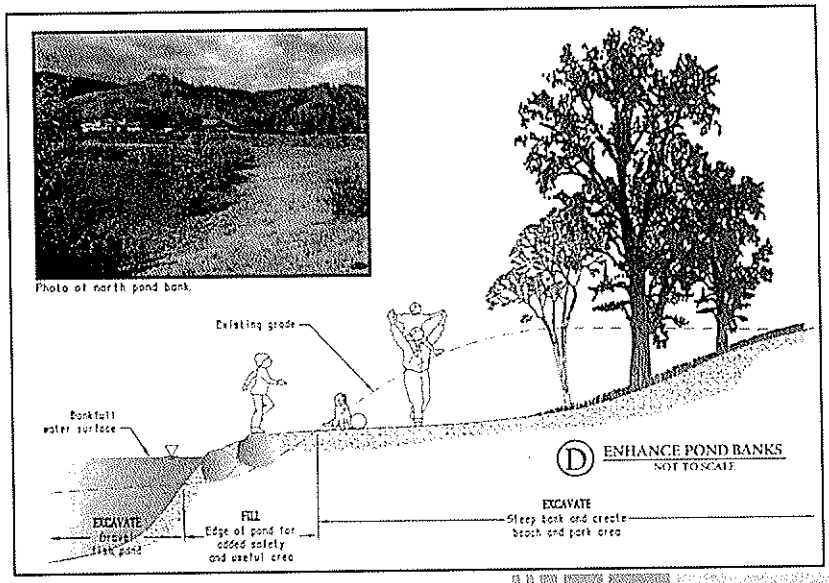


Photo upstream of Bridge.



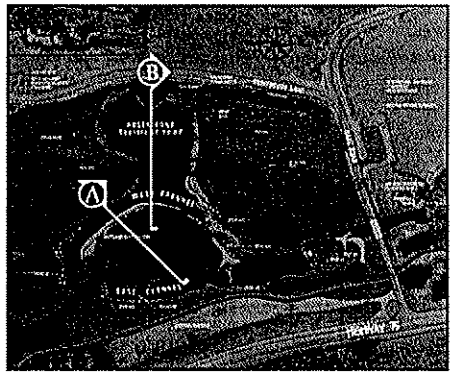
C WEST BANK TREATMENT UPSTREAM OF BRIDGE
NOT TO SCALE

Photo of north pond bank.

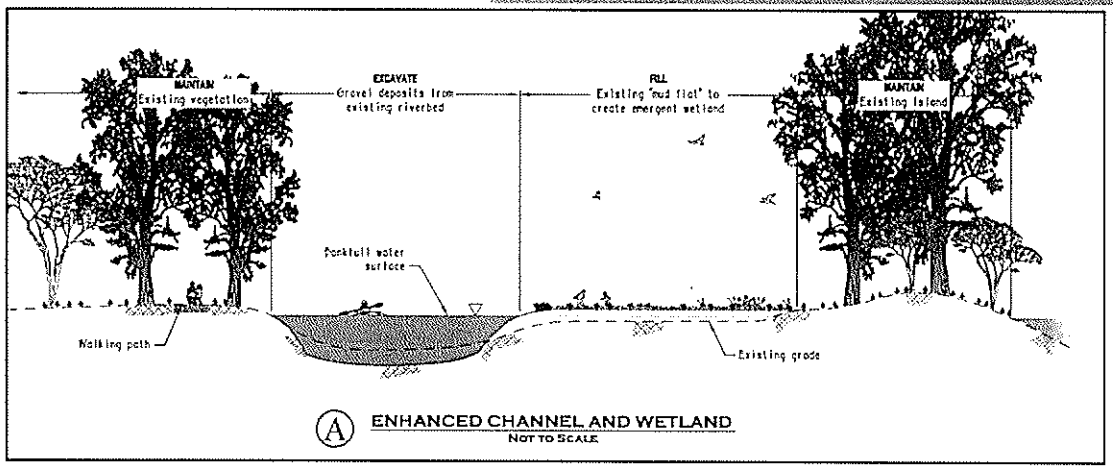


D ENHANCE POND BANKS
NOT TO SCALE

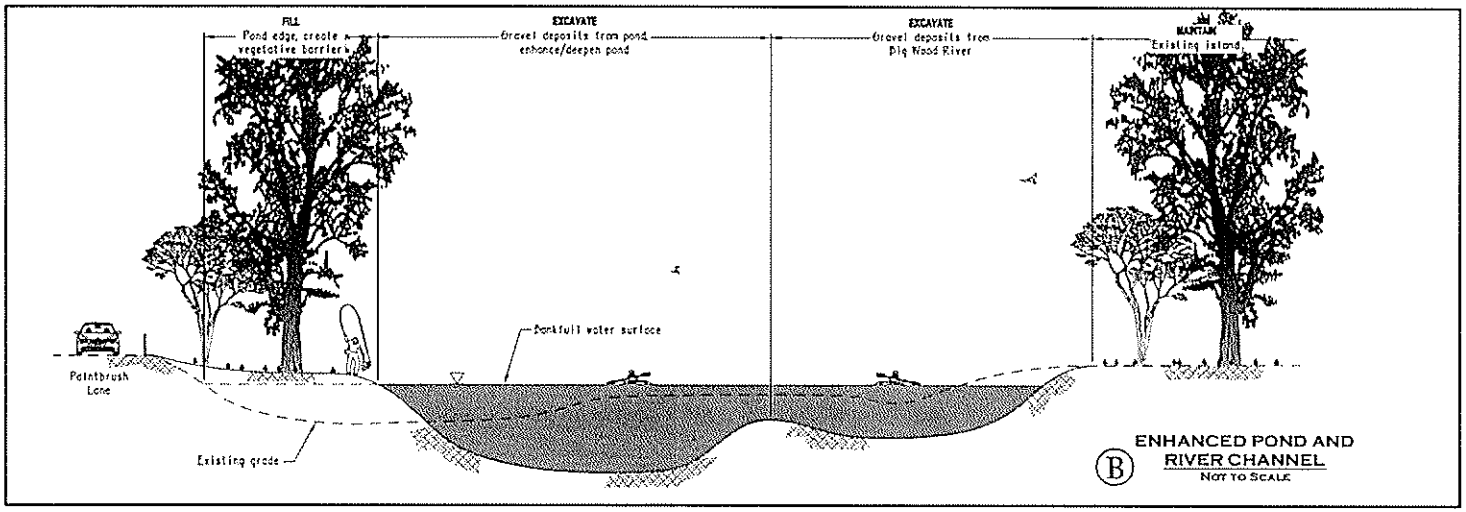
3.9 WHITEWATER PARK- CHANNEL SECTIONS



PLAN VIEW - POND AREA
NOT TO SCALE



A ENHANCED CHANNEL AND WETLAND
NOT TO SCALE



B ENHANCED POND AND RIVER CHANNEL
NOT TO SCALE