

MetroPlan



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*October
1999*

Smith and Bybee Lakes Wildlife Area

Recreation Facilities Plan



**SMITH AND BYBEE LAKES WILDLIFE AREA
RECREATION FACILITIES PLAN**

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SMITH AND BYBEE LAKES WILDLIFE AREA RECREATION FACILITIES PLAN

Prepared for
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Funded by
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October 1999



Executive Summary

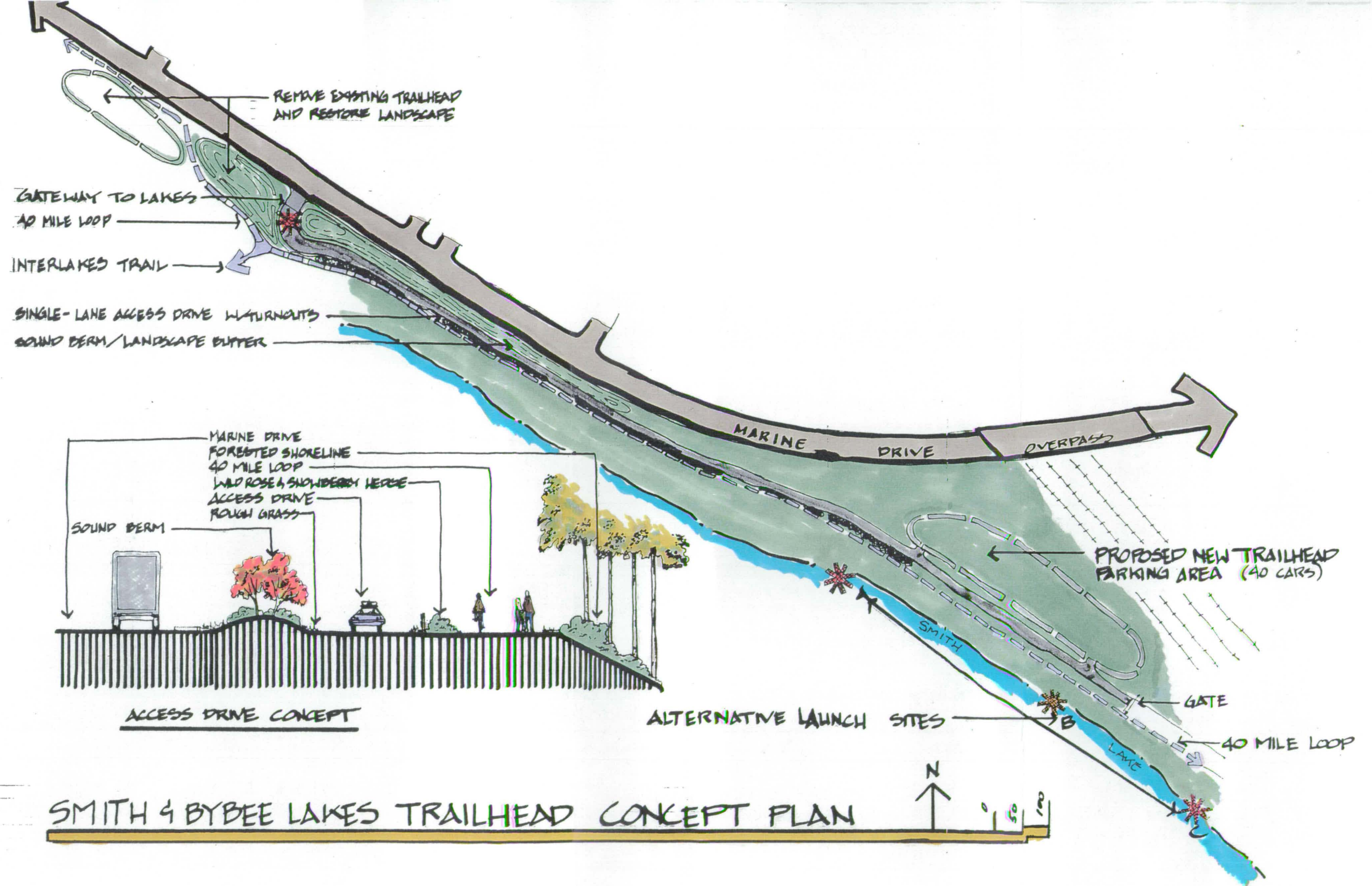
Smith and Bybee Wildlife Area is a 2,000 acre natural open space managed by Metro Regional Parks and Greenspaces. Located in north Portland, between the confluence of the Willamette and Columbia rivers, this is a land and waterscape of sloughs, ponds, grassy wetlands, shallow lakes, and riparian forest habitat. Recreational users and environmental education students visit the wildlife area to bird watch, canoe or kayak (no gas-powered motors are allowed) fish or walk. Presently there is a parking lot and trail system located just south of North Marine Drive, 2.5 miles west of Interstate-5. Boating access is through a slough off the parking lot. A short paddle through this slough leads to a portage that allows boaters to reach the main lakes.

This Smith and Bybee Lakes Recreation Facilities Plan has been prepared to address several public issues. Primary among these is that the existing boat launch area puts recreational users into a slough that is prime habitat for western painted turtles. Additionally, boaters must portage from the slough overland into Bybee Lake. The 1990 Natural Resources Management Plan also calls for recreation to be concentrated on Smith rather than Bybee Lake, which is to be more of a wildlife reserve.

Other issues also present an opportunity to change existing recreation patterns. The widening of North Marine Drive, scheduled for next year, will result in an extension of the 40-Mile Loop Trail, as well as construction of sound barriers between the road and wildlife area. The trail extension, along with future plans for taking the trail around the lakes, will likely result in increased recreation use of the area. The current parking area is too small to meet these anticipated needs. Because city transportation planners prefer to minimize the number of driveway entries for safety reasons, the entrance to the Smith and Bybee Lakes parking area will be re-designed as well. Additionally, the present parking area is too small for a bus turnaround.

This alternative (pictured on the following page) calls for a new gateway entry. A multiple-use trailhead is located at "the triangle" area just south of the Marine Drive overpass, west of the railroad yards. The proposed new boat launch is located directly south of the parking area. This design concept provides a strong sense of entry that contrasts with the industrial land uses along North Marine Drive. Visitors will have the sense that they have arrived at a managed "greenspace" at the moment they make the turn through the low stone walls and tree covered berms. Boaters will gain direct access to Smith Lake without a portage. The new launch does not impact any important wildlife use areas. The "triangle" site is level, relatively inexpensive to develop, and mostly sheltered from highway noise. Boaters, cyclists, walkers and anglers can share it. This allows Metro managers to consolidate infrastructure at a single location (e.g. toilet, information boards, parking) with one entrance.

A related topic addressed in this plan, at a lesser level of detail, is the need for a covered shelter to facilitate environmental educators' use of the area. Given Oregon's mild but wet weather, a covered shelter, strategically placed just off of the Interlakes Trail, will improve the user experience considerably.



SMITH & BYBEE LAKES TRAILHEAD CONCEPT PLAN



R L I S
REGIONAL LAND INFORMATION SYSTEM

Smith & Bybee
Lakes

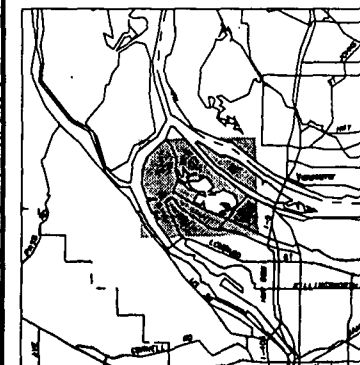
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Location map

Background and Need for This Project

Smith and Bybee Wildlife Area is a 2,000 acre natural open space managed by Metro Regional Parks and Greenspaces. Located in north Portland, between the confluence of the Willamette and Columbia rivers, this is a land and waterscape of sloughs, ponds, grassy wetlands, shallow lakes, and riparian forest habitat. It is one of the largest, protected urban wetland systems in the United States. Recreational users and environmental education students visit the wildlife area to bird watch, canoe or kayak (no gas-powered motors are allowed) fish or walk. Presently there is a parking lot and trail system located just south of North Marine Drive, 2.5 miles west of Interstate-5. Boating access is through a slough off the parking lot. A short paddle through this slough leads to a portage that allows boaters to reach the main lakes.

The City of Portland, Metro Regional Government and the Port of Portland adopted the *Natural Resources Management Plan for Smith and Bybee Lakes* in November 1990. The goal of this plan is to place primary emphasis on managing the area for wildlife. Recreational uses are allowed that are compatible with wildlife protection. The plan sets forth objectives, policies and projects for activities in the wildlife area.

The City of Portland prepared a recreation master plan for Metro on the area in November 1992. It contains a site analysis, existing conditions and a conceptual facilities plan. However, with the change in roadway alignment, increased development surrounding the wildlife area and the flooding of February 1996, many aspects of this plan are felt to be no longer feasible. Nevertheless, some recreation improvements are long overdue. The present parking area is undersized, is too small to allow buses to turn around, and is not very aesthetically appealing. The informal boat launch leads into a slough that is important habitat for western painted turtles. Protection of this sensitive species is an important management objective at Smith and Bybee Lake Wildlife Area. Boaters paddling through their habitat disturb the turtles. Once through the slough, boaters are faced with a short portage on a muddy path in order to gain access to the main lakes. They then find themselves in Bybee, rather than Smith Lake. This is contrary to the 1990 Management Plan, which calls for recreation to be concentrated in Smith Lake.

While the Interlakes Trail has been much improved over the past few years, users have only a single portable toilet for their use. Environmental educators have also expressed the need for a shelter to gather students under during bad weather.

To help resolve these issues, Metro and the Smith and Bybee Lakes Management Committee initiated a process to develop an updated and detailed recreation facilities plan for the Smith and Bybee Lakes Wildlife Area. The resulting plan documented in this report includes siting and preliminary design of a gateway entry, multiple-use trailhead, boat launch, education shelter, toilet, and landscaping. These facilities should support and enhance recreation use of the area, while also improving the primary function of protecting wildlife.

Public Involvement

As the managing agency of the wildlife area, Metro is committed to making decisions only after gathering input from a broad array of interested citizens. To do this effectively, this project began by building a strategic plan for gathering citizen views. This provided guidance throughout the process and an opportunity to measure success. Below is a summary of the process used. A more complete description is in the appendix section of this document.

The first step was to state the goals for this public involvement campaign. These were:

- Citizens will feel they guided the process and the outcome of this project.
- Working relationships between Metro, the City of Portland, and the Port of Portland will be maintained or improved.
- Metro will build on its positive relationship with the Friends of Smith & Bybee Lakes.
- Citizens will feel they were included from the beginning and were provided with information on all options considered.
- Citizens will understand the process by which the final decision is made.

With these goals in mind, the various groups or "publics" were identified that had similar interests or commonalities. These included paddlers and boaters, other recreational users of the lakes, educators and interpreters, adjacent landowners, citizens of North Portland and public agencies that work with or have oversight of Smith and Bybee Lakes Wildlife Area.

Within each of these publics, interest groups and representatives were identified. For example, boating interests included the Friends of Smith and Bybee Lakes, Oregon Ocean Paddlers (OOPS), Lower Columbia Canoe Club, Alder Creek Kayak and Canoes and the Bass and Pan Fish Club. Individual boaters and others not affiliated with these groups were also identified and contacted.

The objective was to make the public involvement process as inclusive as possible given the timelines and limited project budget. The Smith and Bybee Lakes Management Committee reviewed the list to ensure that all potentially interested or affected groups or individuals had been included.

A calendar was prepared with critical dates for making contacts. These included special events, club, agency and management committee meetings; newsletter deadline dates; and decision points. All of this information was duplicated and bound, and copies held by both the Metro Wildlife Area Manager and the consultants. This provided identical guidance and timeline to both parties making contacts. The strategy provided clear direction but also served as a flexible tool, which could be adjusted as necessary throughout the process.

It is important to note that this strategy did not call for the usual "open house" meetings. Instead, project planners went to where the public already was so that people would not have to dedicate yet another night out of their busy schedules to come to a large meeting.

Contact Chronology

With this as the beginning, tasks were divided and contacts begun. The following is a chronology of public contacts made during this project.

- March 16*, meeting at Port of Portland to identify issues.
- March 18*, meeting with paddlers group at Metro to identify issues.
- March 21*, kayaked lakes with Friends of Smith Bybee tour. Interviewed several paddlers.
- March 22*, site visit with representatives from Port of Portland.
- March 29*, hot topics at the Columbia Slough Watershed Council Meeting
- March 31*, briefing about the project to Oregon Ocean Paddlers meeting.
- April 1*, meeting with Tom Lipton of BES to discuss permits issues.
- April 6*, mailed 60 announcements to all on the list and then some on the upcoming field visits.
- April 9*, meeting at Metro with various bicycling interests regarding trailhead and the 40-Mile Loop Trail issues.
- April 10*, work party at Smith and Bybee lakes, handed out flyers telling about the project and how to get involved.
- April 12*, short presentation at the St. Johns Neighborhood Association meeting.
- April 13*, briefing to Charles Ciecko and Dan Kromer of Metro Regional Parks.
- April 13*, meeting with Smith and Bybee educators group to build shelter design program.
- April 20*, attended Marine Drive widening project meeting and discussed access issues.
- April 27*, Smith and Bybee Lakes Management Committee meeting- discussed trailhead site selection.
- May 4*, meeting with North Marine Drive widening design team to work out access issues.
- May 8*, briefing to Lower Columbia Canoe Club.
- May 8 and 9*, created a display and give out cards on the project at Smith and Bybee Lakes Days.
- May 13*, field trip with canoe and kayak interests to look at trailhead design.
- May 14*, field trip with educators to select shelter site.
- May 25*, Smith and Bybee Lakes Management Committee meeting - trailhead design review and recommendation.
- May 26*, presented the 3 parking area options to Dan Kromer and Charles Ciecko.
- June 9*, meeting with sub-group of the management committee to finalize trailhead design.
- June 22*, presentation to Smith and Bybee Lakes Management Committee.

In addition to the meetings above, there were a number of phone conversations with various individuals and articles about the projects placed in several organization and neighborhood newsletters. Overall, there is strong support for the selected trailhead location and design. There are reservations regarding the extent to which the new facilities will be low key and "rustic," as opposed to a landscaped park. This issue will need to be addressed in the design development stage.

Project Design

Selecting a site for a new trailhead and boat launch to reduce conflicts between boaters and western painted turtles was the primary purpose of this project. As noted in the "Background and Need" section of this report, the existing launch is inconvenient to users, potentially detrimental to western painted turtles, and the current parking area is not a very aesthetic entry for users. The first step was to identify issues that needed to be resolved in selecting a new launch area, locate potential sites, and then to develop site selection criteria to help in the evaluation and selection. Issues were developed through consultations with various users and stakeholders, particularly recreational users.

The following issues were given highest priority.

Planning Issues

- Protection of sensitive habitats, particularly western painted turtles.
- Integration of 40-Mile Loop Trail into design.
- Clustering of recreational facilities for ease of maintenance.
- Potential for vandalism or inappropriate use if facilities are hidden from view.
- Highly variable water levels make ideal siting of facilities problematic (particularly if and when the water control structure is removed).
- Most desirable boat access areas are on Port of Portland property.
- Widening of Marine Drive may create access problems.
- Noise from Marine Drive can impact educational activities.
- Metro should demonstrate progressive environmental design.
- Proposed new county jail site could provide boat launch option.

Using these issues, potential sites were identified that could be suitable for a new trailhead and boat launch (the most valuable information proved was the intimate knowledge of the surrounding area from the Wildlife Area Manager and several committee members). The south shore of the lake was dropped from consideration due to land ownership issues. The west shore of Bybee Lake had good potential if Multnomah County sited the new jail at Leadbetter Peninsula. The north shore of Smith Lake had two or three possibilities along the abandoned route of North Marine Drive. These sites belong to the Port of Portland. Another possible site was the Portland Container property along North Portland Road. While not presently in public ownership, there has been talk over the years about acquiring this site. Also included was the existing launch site in the evaluation as a measure against how much progress was possible in terms of resolving project issues. Project participants were asked if there were any additional sites that should be considered. None were suggested.

Thus, in all five potential sites were identified, (see map on following page):

- 1) *Existing trailhead.*
- 2) *Triangle site*, located on abandoned section of Marine Drive just south of the overpass.
- 3) *Old launch*, located on abandoned section of Marine Drive at the old boat launch.
- 4) *Container site*, located on North Portland Road.
- 5) *Leadbetter Point*, located on Bybee Lake, the Multnomah County jail site.



Smith-Bybee Lakes Trailhead Site Selection Criteria

The next step was to identify criteria that could be used to evaluate these five sites. A set of criteria was drafted by the consultant, then reviewed by various participants, including boaters, 40-Mile Loop Trail users, educators, the Smith and Bybee Lakes Management Committee and Metro Parks and Greenspaces managers.

Description of site selection criteria:

1. *Wildlife*: The new trailhead and boat launch should avoid sensitive wildlife habitat areas, such as concentrations of western painted turtles, marshes, or waterfowl gathering areas.
2. *Portage*: Allow direct access to lakes without the need to portage.
3. *Smith Lake*: Direct access to Smith Lake is preferred over access to Bybee Lake.
4. *Short boat carry*: boaters should not have to carry boats more than 100 yards from parking to launch.
5. *Deep Water*: Access should be to deeper water to facilitate summer use.
6. *40 auto spaces*: Initially, the site should be able to accommodate up to 40 car spaces.
7. *Bus access*: 2 bus spaces for group use, plus space to turn buses around.
8. *Visibility/personal safety*: The trailhead should be visible from surrounding areas (e.g. main roads).
9. *Accessible*: The trailhead should be able to be designed to accommodate disabled access.
10. *Integration with other facilities*: If possible, the new trailhead should serve multiple functions (boat launch, hikers, bicyclists).
11. *Wind sheltered*: The boat launch area should be sheltered from east winds.
12. *Easy maintenance*: Close to main access points, not spread out.
13. *Quiet*: The trailhead should be protected from truck noise along Marine Drive.
14. *Easy to find*: Recreational users should be able to locate without too much complex navigation.
15. *Security*: The site should be self-contained and convenient to patrol.
16. *40-Mile Loop Trail*: The site should allow direct access to the 40-Mile Loop Trail.
17. *Cost*: The site should be publicly owned and relatively inexpensive to develop and maintain.
18. *Circulation space*: The site should be large enough to accommodate multiple pathways (hikers, bikes, boats, and vehicles.)

Each site was rated using a simple comparative matrix that identified whether it met each criteria, and relatively how well. Where information was lacking, no evaluation was done. The matrix is displayed on the following page. The *Triangle site* met the highest number of evaluation criteria. It also met what many considered to be three of the most important ones: avoidance of sensitive wildlife areas, direct access into Smith Lake, and the opportunity to consolidate hiking, bicycling, and boater uses at one location.

Smith-Bybee Lakes Trailhead Site Selection Criteria

Fully meets criteria +

Partly meets criteria n

Does not meet criteria -

Not evaluated ?

Criteria	triangle (2)	existing (1)	Leadbetter (5)	old launch (3)	container (4)
wildlife	+	-	-	+	-
portage	+	-	+	+	+
smith lake	+	-	-	+	+
short boat carry	+	+	?	-	n
deep water	-	-	?	-	-
40 vehicle spaces	+	-	+	-	+
bus access	+	-	+?	-	+
visible	n	+	+?	-	n
accessible	n	-	n	n	n
integrates w/other facilities	+	+	-	-	-
wind sheltere	-	+	n	-	+
easy to maintain	+	+	n	-	?
quiet	n	-	?	+	n
easy to find	+	+	-	n	+
security	n	+	?	-	n
40-Mile Loo Trail access	+	+	-	+	+
circulation	+	-	?	-	+
cost	+	+	+	+	-

Trailhead and Boat Launch Design

Once the Triangle site was selected, developing conceptual design alternatives began. There were three important challenges to be worked through.

1. *How to get cars and buses from North Marine Drive to the Triangle site.*

The obvious route was along the old route of Marine Drive, which is presently closed and vacated though still physically intact. There is a "missing link" between these two roads. With the planned widening of North Marine Drive, there is a potential ingress and egress safety challenge. Also, since the abandon section of Marine Dr. is presently used as a section of the 40-Mile Loop Trail, opening it up to motorized vehicles creates a potential conflict between users.

2. *How to design the parking area.*

The new parking area needs to accommodate 40 cars and two buses, while allowing for occasional overflow parking during special events and for eventual expansion. The design should minimize pavement.

1. *How to get access from the parking area to a boat launch.*

The "Triangle site" sits on a terrace about 10' higher than the normal lake level. A steep sand-fill embankment separates the road from the lakeshore. There are at least 3 potentially good launch sites along the shore.

To solve the first challenge, a meeting was held with planners of the North Marine Drive widening project. Working together, a point further to the east was selected for the wildlife area entrance that still had adequate safety distance from the end of the overpass. Sound berms and walls to create a "park entry portal" appearance were designed that will lead users into the site. To create a separation between 40-Mile Loop Trail users and trailhead-bound vehicles, a single-lane drive with turnouts concept, similar to many National Forest recreation roads, is proposed. This allows space for a native shrub hedgerow as a separation between motor vehicles and trail users. The new entry drive design should result in a park-like portal that will allow users to "decompress" from the urban, industrial landscape they have just negotiated.

The entire design is pictured on the following three foldout pages. The first drawing (sheet 1) shows the entry area, which is located immediately north of the Interlakes Trail. Low stone walls, a sign, and tree-covered berms flank the entry. A reverse curve leads to an orientation area, where visitors can view a map or be dropped off near the trail. The entry drive then narrows to a single-lane width, with turnouts every 200' to allow vehicles travelling in opposite directions to pass safely (see sheet 2). Wooden guardrails at these turnouts protect 40-Mile Loop Trail users from vehicles. A hedgerow of native snowberry and wild rose provides a visual separation in between the turnouts.

About 1/4 mile east is the trailhead and boat launch (sheet 3). The parking area is designed as a one-way loop. It can easily accommodate 40 cars and 2 buses, while allowing for overflow and expansion. A timber gate prevents visitors from continuing east on the abandoned road. A new vault toilet and kiosk are centrally located. The boat launch is located just south of the parking area, on a cove-shaped beach created by carving back the sand-fill embankment along the road. A turnout allows boaters to unload their gear before they park, thus reducing the distance they must carry their boats. This will be very convenient for large groups, such as the monthly Friends of Smith and Bybee Lakes canoe tours. This drop-off area will be separated from the entry drive by a row of fixed bollards to keep motor vehicles from the 40-Mile Loop Trail path. Access to the beach is via a double set of timber steps, with a log "boat slide" in the center. There is also a wheelchair accessible paved path that switchbacks down the embankment. Due to the steepness of the fill bank (estimated at 2:1 ratio) it is likely that low retaining walls or a boulder stabilized slope will be needed along to top and bottom of the cove, and along the path.

To accommodate wheelchair users and work with fluctuating lake levels (and a muddy bottom,) a recommendation to stabilize a portion of the cove, and out into the lake. The preferred method for doing this is to lay an interlocking rubber mat system over a geotextile fabric, laid onto the mud bottom. This is considered to be experimental, and a small section must be tried before going too far. The interlocking rubber mat system is used at Simax Beach on the Deschutes National Forest to allow wheelchair users to get across soft sand. The mat has not been tried on mud, but suspect that a geotextile underlayment should adequately distribute loads. The mat may need to be anchored down with boulders so that it does not float up during high water.

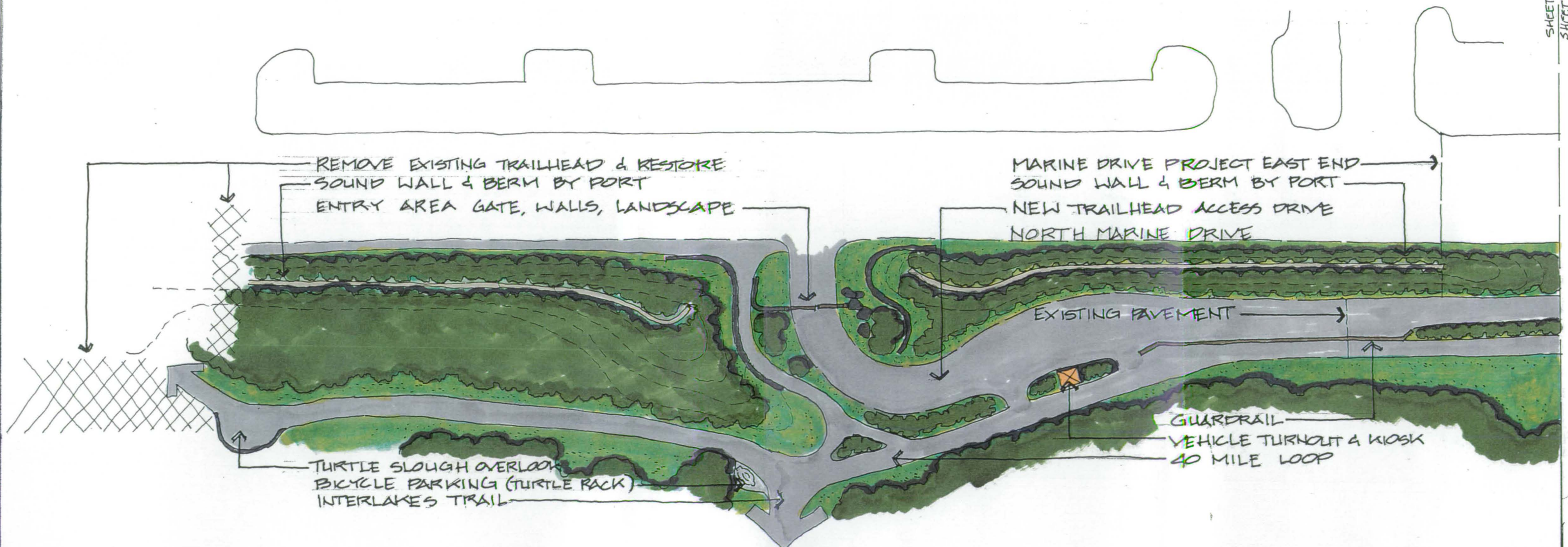
The launch area has been located roughly in the mid-point of the Triangle site, where there is a convenient break in the shoreline trees. It is recommended that an informal line of large round boulders alongside the edges of the opening to help break waves and catch debris floating towards the shoreline. A short log boom might also help. This system needs to be designed by an expert in shoreline systems at the design development stage of this project.

40-Mile Loop Trail users follow the embankment above the lake, and never have to cross-vehicular traffic while traversing through the area. The new trailhead will serve their needs as a staging area or valuable pit stop.

The selected design was developed after considering three alternatives, pictured and briefly described in the appendix.

SHEET ONE: ENTRY AREA

DESIGNED BY: DEAN APOSTOL
LANDSCAPE ARCHITECT



SMITH AND BYBEE LAKES WILDLIFE AREA
RECREATION FACILITIES PLAN

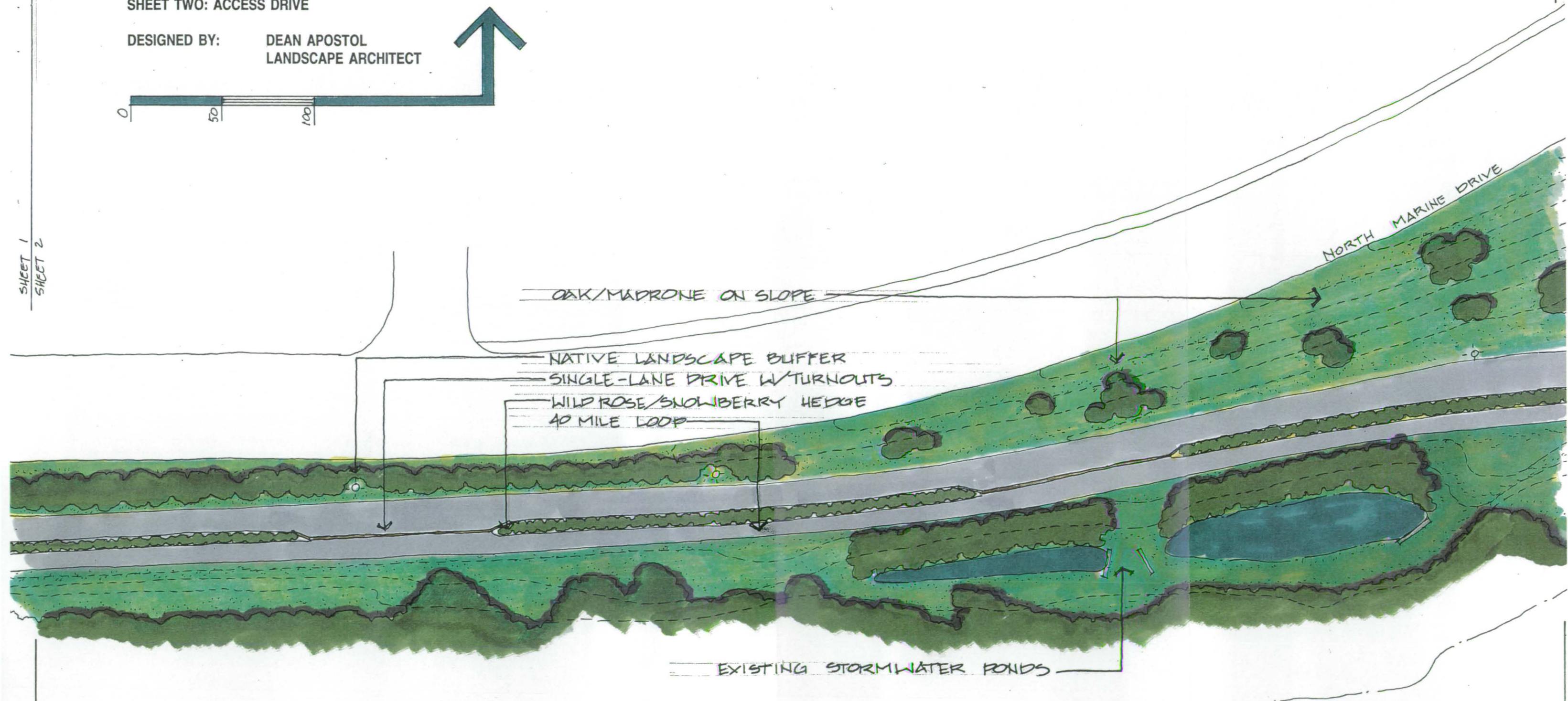
SHEET TWO: ACCESS DRIVE

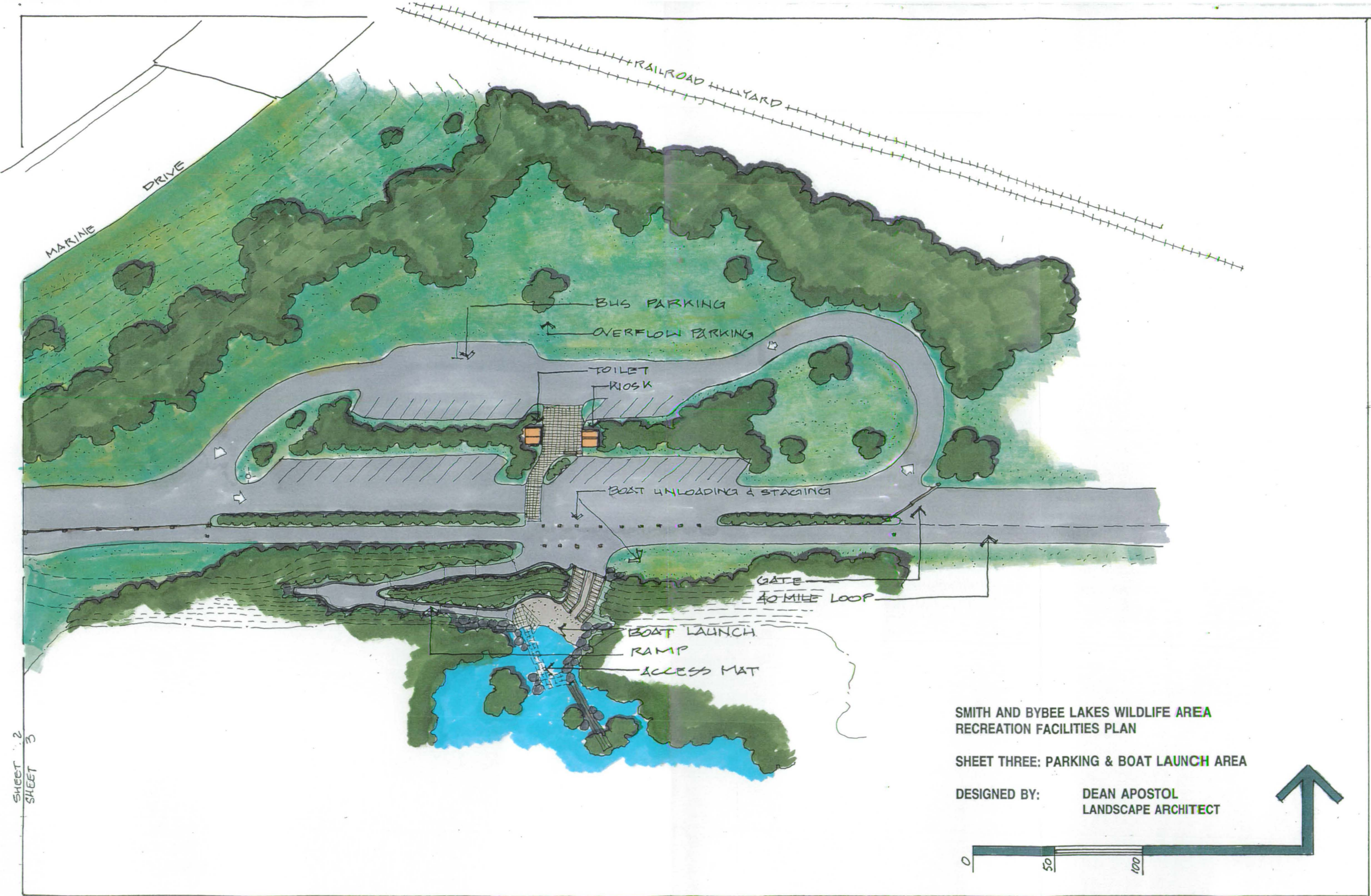
DESIGNED BY: DEAN APOSTOL
LANDSCAPE ARCHITECT



SHEET 2
SHEET 3

SHEET 1
SHEET 2

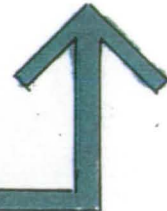




SMITH AND BYBEE LAKES WILDLIFE AREA
RECREATION FACILITIES PLAN

SHEET THREE: PARKING & BOAT LAUNCH AREA

DESIGNED BY: DEAN APOSTOL
LANDSCAPE ARCHITECT



SHEET 2
SHEET 3

Cost Estimate

The cost estimate displayed on the following pages is based on constructing the selected design. Built into this estimate is the assumption that the entry berms and sound walls will be paid for as part of mitigation for the Marine Drive widening project. There are always some uncertainties in cost estimates at this stage of design

Smith Bybee Lakes Cost Estimate Assumptions

Item	Assumption
<i>Entry Drive</i>	New paved road over flat terrain, sand subsurface, 8" baseover fabric with 3" asphalt.
<i>Landscaping</i>	Imported soil, container plants, entry area, parking, roadside and launch area.
<i>Reforestation</i>	Small, bare root native trees and shrubs massed within rough grass and wildflower matrix. Some soil amendment.
<i>Retaining Walls</i>	Dry native stone 2' high.
<i>Timber Steps</i>	PT 6x6 risers with packed gravel treads, 12' wide.
<i>Double Vault Toilet</i>	Based on Romtec SST Aspen model. Includes delivery and installation.
<i>Grading Launch Cove</i>	Carves out a curved shape out of straight 2:1 sand fill bank. Create a 1000 ft ² level beach.
<i>Gates</i>	Timber clad, steel frame gate used in Columbia Gorge.
<i>Rubber matting</i>	Same system as Simax Beach on Deschutes Forest.
<i>Directional signage</i>	Simple roadside signage directing users to and from the trailhead.
<i>Cove Ramp</i>	4' wide asphalt paved ramp @ 5% grade.
<i>Stormwater improvements</i>	Assumes the need to treat outfalls of existing pipes under the abandon section of North Marine Drive.
<i>Parking area</i>	New paved trailhead, similar to entry drive in design.
<i>Bollards</i>	Simple 8x8s with shaped top.
<i>Info kiosk</i>	10x10ft with roof over 2-3 panel information boards, does not include signage.
<i>Pavers</i>	Concrete interlock style @ parking area plaza.
<i>Guardrail</i>	Similar to Columbia Gorge painted guardrail, but lighter construction. (e.g. double 3x8 rails over 8x8 posts.)
<i>Paving demolition</i>	Includes median along the abandon section of North Marine Dr. and existing parking area. Incorporates ground up materials into new paving base.
<i>Striping</i>	Painted parking stalls, accessible parking, arrows.
<i>Entry Walls</i>	Same as other retaining walls. Dry native stone.
<i>Entry sign</i>	Assumes high quality entry ID sign.
<i>Boulders @ cove</i>	Large, 2 ton native round boulders placed around cove.
<i>Paving overlay</i>	Assumes 1" lift over abandon section of N. Marine Dr. entry drive. Does not include bike path.
<i>Permits</i>	Building, stormwater discharge, environmental.
<i>10% Contingency</i>	For items overlooked or under-priced.
<i>10% Design</i>	Assumes design development, construction and inspection.

Cost Estimate for Smith and Bybee Lakes Trailhead

Item	Unit Cost	Quantity	Total Cost
Entry drive	\$2.25/SF	8400SF	\$ 18,900
Landscaping	\$1.25/SF	39,000SF	\$ 48,750
Reforestation	\$.25/SF	100,000SF	\$ 25,000
Retaining Walls	\$35/SF	600SF	\$ 21,000
Timber Steps	\$100/EA	20	\$ 2,000
Double Romtec Toilet	\$30,000/EA	1	\$ 30,000
Grading Launch Cove	\$4/CY	250CY	\$ 1,000
Gates	\$3000/EA	2	\$ 6,000
Rubber matting	\$3/SF	500SF	\$ 1,500
Directional signage	\$300/EA	10	\$ 3,000
Cove Ramp	\$4/LF	250LF	\$ 1,000
Stormwater Imp.	Allowance	Allowance	\$ 7,500
Parking Area	\$2.25/SF	18,200SF	\$ 40,950
Bollards	\$100/EA	10	\$ 1,000
Info kiosk	\$5000/EA	2	\$ 10,000
Pavers	\$4/SF	1000SF	\$ 4,000
Guardrail	\$20/LF	450LF	\$ 9,000
Paving Demolition	\$.25/SF	30,000	\$ 7,500
Striping	Allowance	All	\$ 1,000
Entry Walls	\$35/SF	300SF	\$ 10,500
Entry Sign	\$All	1	\$ 2,500
Boulders @ cove	\$150/EA	30	\$ 4,500
Paving Overlay	\$.50/SF	24,000SF	\$ 12,000
Subtotal			\$268,600

Item	Unit Cost	Quantity	Total Cost
Permits	Allowance		\$ 10,000
10% Contingency			\$ 27,000
10% Design			\$ 27,000
Final Estimate			\$332,600

Proposed Construction Phasing

The following is a proposed phasing schedule for project implementation. The phasing is organized to facilitate construction logistics, and also to allow for early opening of the new trailhead. Also, the expenditures in each phase have been roughly equalized in order to minimize impacts to the trust fund. Note that the total at the end of phase three is larger than the total that appears on the preceding cost estimate. This is due to factoring in 5% for inflation over the duration of construction.

Phase One

Item	Cost Estimate
Build new parking area	\$ 40,950
Entry Drive	\$ 18,900
1/3 Paving Demolition	\$ 2,500
Stormwater improvements	\$ 7,500
Subtotal	\$ 69,850
Permits	\$ 10,000
10% Contingency	\$ 8,000
75 % Design	\$ 21,000
Total Phase One	\$108,850

Phase Two

Item	Cost Estimate
Gates	\$ 6,000
Grade launch cove	\$ 1,000
Rubber mat	\$ 1,500
Timber steps	\$ 2,000
Retaining walls	\$ 21,000
Cove ramp	\$ 1,000
Boulders @ cove	\$ 4,500
Directional signs	\$ 3,000
Landscaping	\$ 48,750
Bollards	\$ 1,000
Pavers	\$ 4,000
Striping	\$ 1,000
Subtotal	\$ 94,750
15% Contingency & inflation	\$ 14,000
25 % Design	\$ 6,000
Total Phase Two	\$114,750

Phase Three**Item** **Cost Estimate**

Reforestation \$ 25,000

2/3 paving demo \$ 5,000

Guardrail \$ 9,000

Kiosks \$ 10,000

Toilet \$ 30,000

Entry walls \$ 10,500

Entry sign \$ 2,500

Entry drive paving overlay \$ 12,000

Subtotal **\$104,000**

20% Contingency & inflation \$ 20,800

Total Phase Two **\$124,800**

Total Project **\$348,400**

Education Shelter

The need for a shelter to facilitate use of the wildlife area by environmental educators is viewed as a replacement for the original "Environmental Education Center" concept identified in the 1992 Recreation Master Plan. This center will not be built at this time due to budget constraints and environmental concerns.

The first step in designing and locating a shelter was to ask the questions:

- Who is it for?
- How will it be used?
- By how many people?

The answers to these questions were used to build a conceptual "design program," or set of criteria for what the building should be like, and where it should be located. The questions were put to a group of environmental educators who use Smith and Bybee Lake Wildlife Area for tours and work parties, primarily with school children.

Smith-Bybee Lakes Education Shelter Proposed Siting and Design Criteria

Siting and Design Criteria

1. Distance from trailhead: up to 1/4 mile from the drop-off area.
2. Relation to Interlakes Trail: visible from the trail rather than right on it.
3. Relation to habitat: should not disturb important habitat, but could have views into habitat areas.
4. Flooding: could be sited to experience occasional flooding.
5. Safety: should be away from tall cottonwood trees.
6. Comfort: should be sheltered from cold east winds and stormy southwesterers.
7. Image/aesthetics: the site should have good aesthetic feel, preferably at the edge of forest and meadow. But aesthetics are lower in priority than habitat protection.
8. Proposed uses: outdoor classroom with storage, warming/resting area.
9. Size of Shelter: Accommodate 30-35 people at one time, about 300 square feet.
10. Degree of weather protection: overhead rain, sideways rain, east winds, and summer heat.
11. Image and durability: the shelter should be "rustic" in appearance, reflecting the Northwest tradition of park buildings. It should also however, make use of synthetic or recycled materials, Promote "green" building technology, and be resistant to vandalism.
12. Season of use: the shelter will be used year around.

With the preceding criteria in mind, a day was spent at the Lakes scouting out potential sites and rating them. In all, seven alternatives were evaluated and described below.

Site Name	Finding
<i>Site #1 "Dead Willows"</i>	
Distance from trailhead	1/4 mile
Relation to Interlakes Trail	adjacent
Relation to habitat	away from important habitat
Flooding	major floods only
Safety	surrounded by cottonwoods
Aesthetics	moderate close view

Site Name	Finding
<i>Site #2 "Reed Canary Grass"</i>	
Distance from trailhead	1/4 mile
Relation to Interlakes Trail	adjacent
Relation to habitat	away from important habitat
Flooding	occasional flooding
Safety	surrounded by cottonwoods
Comfort	wind sheltered, shady
Aesthetics	moderate views
<i>Site #3 "Morgan's Blob"</i>	
Distance from trailhead	1/4 mile
Relation to Interlakes Trail	adjacent
Relation to habitat	overlooks turtle slough
Flooding	above floods
Safety	cottonwoods on lee side
Comfort	sheltered, shady
Aesthetics	view into slough
<i>Site #4 "Smith Meadow"</i>	
Distance from trailhead	greater than 1/4 mile
Relation to Interlakes Trail	visible from Interlakes trail. Partly screened.
Relation to habitat	adjacent to reed canary grass meadow
Flooding	frequent flooding likely. Need platform
Safety	no cottonwoods
Comfort	wind sheltered from east. Open to south sun.
Aesthetics	wonderful view south, nice feel.
<i>Site #5 "Planted Place"</i>	
Distance from trailhead	greater than 1/4 mile
Relation to Interlakes Trail	visible from
Relation to habitat	recently replanted forest
Flooding	infrequent flooding
Safety	surrounded by big cottonwoods
Comfort	sheltered, shady
Aesthetics	in woods, no views
<i>Site #6 "Blackberry"</i>	
Distance from trailhead	greater than 1/4 Mile
Relation to Interlakes Trail	nearby
Relation to habitat	edge of forest, adjacent to meadow
Flooding	occasional
Safety	away from tall cottonwoods
Comfort	sheltered from east wind, open to south sun
Aesthetics	nice view to Smith Lake

<u>Site Name</u>	<u>Finding</u>
<i>Site #7 "Interlakes Meadow"</i>	
Distance from trailhead	greater than 1/4 mile, farthest out site
Relation to Interlakes Trail	off trail
Relation to habitat	edge of forest, meadow, near pond
Flooding	occasional flooding
Safety	away from cottonwoods
Comfort	sheltered from east, sunny.
Aesthetics	good view overlooking pond.

The "Blackberry" site was selected by consensus of the environmental educators on the field trip. This site not only meets all of the desired criteria; it also "feels right." It is tucked into a pocket of small trees on the edge of a meadow, with fine views to the south. It will be easy to find, yet also somewhat private feeling. It may not be visible from the lakes, and it should be above high water except during the most exceptional floods.



View from "Blackberry" site

Next Steps

There are a number of steps that will need to be taken prior to on-the-ground implementation.

Step One: *Secure Triangle Site from the Port of Portland.* Collaboration with Port officials throughout this project indicate that a lease or sale agreement is required and amenable to the Port, but details must be worked out before Metro commits further resources to project implementation.

Step Two: *Seek Resources for Implementation, summer/fall of 1999.* These resources could be drawn from the Smith and Bybee Lakes Trust Fund, or capital improvement funds from other sources. Parts of the entry area may be paid for as part of the North Marine Drive widening project. Other potential sources of funding include Multnomah County (jail siting mitigation,) and Portland Parks (40-Mile Loop Trail improvements.)

Step Three: *Design Development, Permits, and Construction Drawings, fall/winter 1999-2000.* Metro will need to hire a consulting team to develop the concept design in greater detail, secure development permits and complete construction drawings. The design development should be done in collaboration with a "design advisory team" drawn from project participants representing boaters, bicyclists, Friends of Smith Bybee Lakes, and others. The Port of Portland, City of Portland agencies, the Smith and Bybee Lakes Management Committee, and Metro will do design review. Permits will be required from these same agencies, as well as from the Oregon Division of State Land and the U.S. Army Corps of Engineers regarding wetland issues. Close coordination with the Portland Bureau of Transportation North Marine Drive Widening Project could result in significant cost savings to Metro.

Step Four: *Construction Bidding for First Phase, spring of 2000.* The assumption at this point is that project implementation may occur in three depending on funding.

Step Five: *Construction of First Phase, Summer/fall of 2000.*

Steps Six and Seven: Bidding and Construction of Phases Two and Three, Summer/fall 2001-2002.

Plan Addendum

Friends of Smith & Bybee Lakes
P.O. Box 83862
Portland, OR 97283-0862



To: Smith and Bybee Lakes Management Committee
Re: Smith and Bybee Lakes Facilities Plan
August 23, 1999

Dear Committee members,

These are the recommendations for the Facilities Plan from Friends of Smith & Bybee Lakes.

Definition of Rustic (Thanks to Peter Teneau)

Rustic means a rougher rather than finished look and simple rather than developed, "improved" look. This might be achieved by textured surfaces, blending colors on structures, and eliminating structures or hardware that are not required to meet code requirements or convenient use of the facility. Planting of natives should be casual to eliminate the need for any but the most minimal maintenance (no lawn). Try as far as possible to mimic the natural Smith and Bybee Lakes environment. Gravel would be fine, but it may not be possible (pavement may be a requirement in this situation). A "park like" appearance should be avoided because it is not compatible with the activity or the atmosphere that we are trying to provide and preserve here (wildlife area). When determining detail choose less rather than more.

Recommendations for Facilities Plan

- Keep it rustic, simple, and low-key.
We would like to see this adopted as a goal that is communicated to the landscape architects and/or contractors who perform further design and development. Items in the current design budget could remain as placeholders, with exceptions noted below.
- Some design items (i.e. pavement for parking lot, double vault toilet) may be acceptable if they lessen the cost of long term maintenance.
- One kiosk is sufficient.
- Landscaping should be casual with natural looking distribution. All landscaping should be native.
- Paving overlay may not be necessary. Old N. Marine Dr. was designed to handle a lot of weight.
- 10 directional signs may be excessive.
- Vehicle access from under the existing overpass should be blocked with either a gate or boulders. This should be included in the Facilities Plan and budget.
- The actual boat launch should be budgeted higher.
The rubber mat system in the Facilities Plan "is considered to be experimental". The Plan also says that the launch area "needs to be designed by an expert in shoreline systems at the design development stage of this project."
- Funding should be from sources other than the Trust Fund as much as possible.
- If implementation is done in phases, the first phase should include boat access to the water.
This includes removal of log debris and at least a rough pathway to the water. Formal development could occur in the second phase.

Sincerely,


Frank Opila, President

From: "Oman, Susan" <omans@portptld.com>
To: 'Emily R' <rothe@metro.dst.or.us>
Date: Tue, Jul 27, 1999 2:05 PM
Subject: Management Committee Meeting 7/27

Emily-

I will not be able to attend tonight's meeting, however, Bill told me this morning that he was planning to go. Based on a cursory review of the conceptual plans for the access improvements to S&B Lakes here are a few preliminary comments:

- Port planning staff recommends a meeting with the City for an interpretation of the NRMP in regard to these improvements and whether they would be allowed under the existing plan.
- The Rivergate Development Standards are applicable for the site improvements. I will put a copy in the mail to you.
- I think it would be a good idea to document potential impacts to turtles and/or turtle habitat on this site. This question will come up at the Port and perhaps at the City as well.
- Stormwater treatment must follow the BES Handbook guidelines. The treatment method must also be approved by the Port.
- I understand the desire for native revegetation, however, some larger trees will be required for portions of these improvements such as along the driveway and within the parking lot area. The City has similar landscape requirements and may require screening as well.
- The site layout should accommodate ADA access. More information on the composting toilet should be submitted for review and approval by both the Bureau of Buildings and Port.
- The traffic impacts for the site improvements will probably be available from the North Marine Drive project. If not, some estimate of traffic use will be needed.

If you would like a formal review of the site proposal, please refer to the RGID Standards for the submittal requirements and/or call me. I will try and get copies of relevant as-built information to you, but it may take some time because of the Port's impending move and my part-time schedule.

SUSAN

CC: "Bach, William N. (Bill)" <bachb@portptld.com>, "M...



4150 N. Suttle Rd. • Portland, Oregon 97217 • 1 (503) 286-8352

May 26, 1999

Ms. Emily Roth
Metro
600 NE Grand Ave.
Portland, OR 97232

Re: Facility Planning

Dear Emily:

Just a few notes for the sub-committee to ponder before doing anything drastic:

1. Doesn't the city code require drinkable/running/potable water? There is no mention of it in the Cost Estimate.
2. We have progressed a long way from the Canopy, Port-a-Potty and Signboard that was discussed four years ago. Are we losing sight of our conservatorship of both a "Natural Area" and the Trust Fund?
3. I suggest we consider a minimum of building at a budget as follows.
 - A. New asphalt for access and bus turnaround (\$40,000).
 - B. Canopy for inclement weather and instructional use (625sq. Approx. \$40,000)
 - C. Informational signboards (can also double as wind breaks for the canopy; not blocking all the view) (\$10,000),
 - D. Gates (\$6,000),
 - E. Toilets (\$30,000? Not in my lifetime! \$4,000 max.),
 - F. Parking on old marine drive (\$ 0)
 - G. Striping parking (\$2,500)
 - H. Landscaping restoration (\$50,000)
 - I. Canoe launch (\$8,000)

4. Asphalt overlay was mentioned at the meeting last night. We are not building a freeway, the existing old Marine Drive should be fine as is for parking and driving access east from where the entry access joins it.
5. I am opposed to the "formal park" designs being presented by the consultants. What we do should be as simple and unobtrusive as possible.
6. I am sure you are all aware that "Recreation" = People therefore "More Recreation" = More People, and that More People = less natural/more damage/etc. In other words, the easier access will allow for more use and abuse. Are you prepared for double or triple the number of people out on the lakes at any given time.
7. In my four years of association with the Smith and Bybee Lakes Natural Areas Management Committee, I have been watching a growing tendency on the part of the committee to dismiss the natural and habitat concerns in favor of access by more people. I am concerned that the easier we make access to the lakes, the more they will be damaged either deliberately or by well-meaning mistakes.
8. I feel that there should be a responsible concern for the stewardship of the Trust Fund. Spending principal does not show good stewardship; spending half a million dollars at one stroke is irresponsible. I agree that some amenities are necessary, however, my vote would be for less expensive ones.
9. We have learned that both the prison project and the Marine Drive extension project are hopelessly over budget and neither have broken ground yet. Anyone depending on them for supplemental financial assistance is due for a rude awaking.

I do not mean to be pushy or obnoxious about the above. I only feel these items should be considered before we spend any more money on this project.

Sincerely,



Gerry Wright

Smith and Bybee Lakes Management Committee
September 28, 1999
Discussion – Recreational Facility Plan

In Attendance:

Frank Opila *	Friends of Smith & Bybee Lakes
Nancy Hendrickson *	Portland Bureau of Environmental Services
Emily Roth	Metro – S & B Wildlife Area Manager
Troy Clark *	Portland Audubon Society
Gerry Wright *	Fuel Processors
Jim Morgan *	Representing Metro Executive Officer
Pat Sullivan	Metro Regional Parks & Greenspaces
Kevin O'Sullivan *	St. Johns Neighborhood Association
Gerry Meyer *	Port of Portland
Jim Sjulín *	Portland Bureau of Parks
Holly Michael *	Oregon Dept. of Fish & Wildlife

* - voting member

1. Compliance with Natural Resource Management Plan

Emily Roth met with Tom McGuire, City of Portland Bureau of Planning, at the end of August to discuss if the draft plan complied with Figure 5 under "Projects" in the 1990 *Natural Resources Management Plan for Smith & Bybee Lakes*. The figure illustrates a "water access point" along the abandon section of North Marine Drive. It was determined the proposed location of the new facility complies with the general location shown in the management plan. It would be a Type 2 land-use review and in conformance with the management plan. In response to inquiries concerning the *Smith & Bybee Lakes Recreation Master Plan*, the City described it as a plan prepared by the Planning Section of the Bureau of Parks & Recreation. It is a conceptual document only, not an adopted land-use document. It has no force of law.

2. Basic design discussion

Frank Opila spoke on behalf of Friends of Smith & Bybee Lakes and entered its letter of August 23, 1999 into the record, listing their design recommendations. The Friends liked the basic concept that is presented in the draft and would like its definition of "rustic" to be included in the design plan.

Gerry Wright echoed the preference for keeping it simple. He equated complexity with high cost.

At present there are no gates or access to the water in Phase I. Recommended was some type of temporary boat launch or that the boat launch be included with Phase I.

It would be advantageous, with the widening of North Marine Drive, to be able to do all the paving and construction under the same contract, bringing costs down.

With a water line at the proposed siting, a drinking fountain would be desirable.

The plan calls for two kiosks. Frank Opila expressed a preference for only one and would like to see the \$5000 for the second kiosk allocated to a boat launch contingency.

3. Phasing – All the phasing is flexible. Emily Roth stated it would be difficult to do phase 2 and 3 separately, it appears they need to be built together (refer to pages 12 and 13 of the facility plan).

4. Funding

Metro Regional Parks & Greenspaces Department, as well as the Friends group feel very strongly that it would be inappropriate to use money from the principle of the trust fund for implementation of the facility plan. That money is to manage and maintain the existing wildlife area.

A fundamental question remains about the status of the property in question in terms of the Port's ownership. Metro is investigating property values to determine whether it can be purchased. The Port has expressed a willingness to work with Metro on the purchase or lease of the parcel.

Receiving money from Metro's general fund may be explored as a funding source.

The State of Oregon has low interest loans for facility development. Oregon Department of Economic Development charges no financial fees; interest is presently between 5 and 5.5% and can be paid back over the next 20 years. Metro finance staff is looking into loan requirements to see if this project would qualify.

Measure 66 was passed last year from which a grant program for local park providers will be established. Metro is waiting to receive grant requirements to learn if this project qualifies for funding.

Measure 26-26 is another possibility. Multnomah County local share funds were reallocated by Metro Council about four months ago. The Smith and Bybee Lakes facility was not included as the plan was not complete at the time nor was a "price tag" attached to it. If a reallocation is again considered, however, the plan could be considered more favorably.

A request has been made of Metro's financial department to look into moving the Smith and Bybee Trust Fund from Metro's general fund and placing it into a different long-term investment strategy that will yield higher interest per year.

Note: The Smith and Bybee Lakes Management Committee approved the plan at its August 24, 1999 meeting.

Appendices

ALWAYS A DRAFT ---- ALWAYS A DRAFT --- ALWAYS A DRAFT --- ALWAYS A DRAFT

COMMUNICATION AND PUBLIC INVOLVEMENT STRATEGY

Smith & Bybee Lakes Facilities Plan

Winter/Spring 1999

Dean Apostol and Marcia Sinclair

This is a communication and public involvement strategy for the Smith & Bybee Lakes facilities plan. This strategy is intended to:

Articulate the goals of this project.

Identify interested publics, stakeholders and key contacts.

Provide preliminary assessment of public concerns based on experience from previous projects, and stakeholder interviews.

Identify tools for opening and maintaining dialogue with interested publics and stakeholders.

Create avenues for bringing publics into the process and encourage their participation in determining the most appropriate design.

Craft appropriate messages that convey the purpose and goals of this project and the elements of the design process that may be influenced by public input.

Where appropriate, use this process to also address METRO's larger communications goals concerning Smith & Bybee, and regionwide efforts.

For this strategy to be successful, it is essential that METRO managers clearly define and articulate their management direction for Smith & Bybee Lakes, as well as the "decision space" within which this planning process and public participation will abide.

The information concerning community attitudes and issues used to develop this strategy was drawn from interviews with METRO personnel. Additional information will be solicited from key contacts.

Our working definition of a public is: "any segment of the population having common characteristics, interests, or some recognized demographic feature...The categories are not mutually exclusive since a person could be a part of more than one public."

Stakeholders are defined as: "Individuals or organizations who have a direct interest in the outcome of a particular project. Thus they have something to gain or lose."

With these two definitions in mind, this strategy was developed to identify the publics and stakeholders interested in Smith & Bybee Lakes, and to address their concerns as they relate to both the planning process and the outcome.

For each public and stakeholder, we established objectives for the outcomes we hope to affect through dialogue with them; we articulated the critical messages we hope they will retain from our communications efforts; and we listed a wide variety of potential tools for establishing two way communication. Time, funding and personal style of the project manager and consulting team will influence the actual implementation of this public involvement effort. This strategy is intended only as a guide.

GOALS OF THE Smith & Bybee LAKES PROJECT

1. Determine environmentally appropriate area from which to launch boats. Identify boaters' parking area. Design boat launch and parking area.
2. Determine appropriate site and design for educational program shelter.
3. Determine appropriate site for toilet facility.
4. Consolidate facilities for maintenance and safety reasons.
5. Place primary emphasis on wildlife habitat management. Provide educational and recreational access as appropriate, so long as they do not conflict with wildlife concerns. METRO *accommodates* but does not necessarily *promote* recreational use.
6. Develop a plan that is ecologically progressive (e.g. "green" building, stormwater treatment)

GOALS OF THE PUBLIC INVOLVEMENT PROCESS

1. Publics will feel they were able to guide the process and the outcome of this project.
2. METRO managers will maintain or improve relationships with City of Portland and Port of Portland.
3. METRO managers will maintain positive relationship with Friends of Smith & Bybee Lakes.
4. Publics will feel they were included from the beginning and were provided with information on all options considered.

5. Publics will understand the process by which the final decision is made--
 - 1 Publics make their recommendation to Smith & Bybee Lakes. Management Committee with rationale. The consultant will also make a recommendation.
 - 2 Management Committee makes a recommendation to Charlie Cieko.
 - 3 Charlie sends recommendation to the Operations Committee.
 - 4 Operations Committee makes recommendation to the METRO Council.
 - 5 METRO Council makes final decision.

PUBLICS:

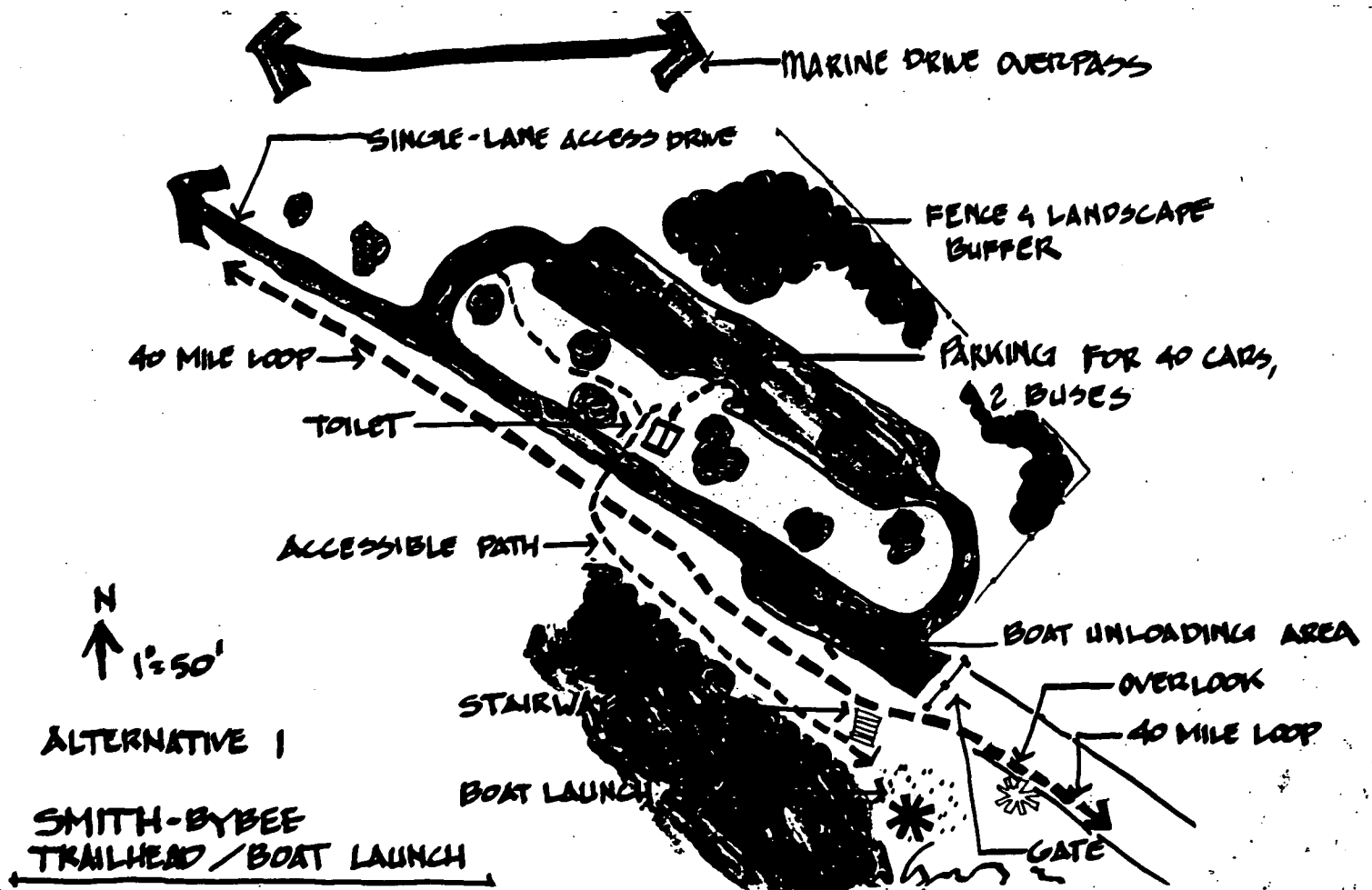
Educators and Interpreters
Paddlers, Boating recreationists
Recreational Land Managers
Transportation Managers
Adjacent or on site landowners
Other recreational users
Natural Resource Agencies
Agency Stormwater Managers
North Portland residents

ADDITIONAL POTENTIAL PUBLICS TO CONTACT:

Lower Columbia Slough Watershed Council
METRO Regional Environmental Management
METRO Park Rangers--Rick Scrivens
News Media
Other METRO employees

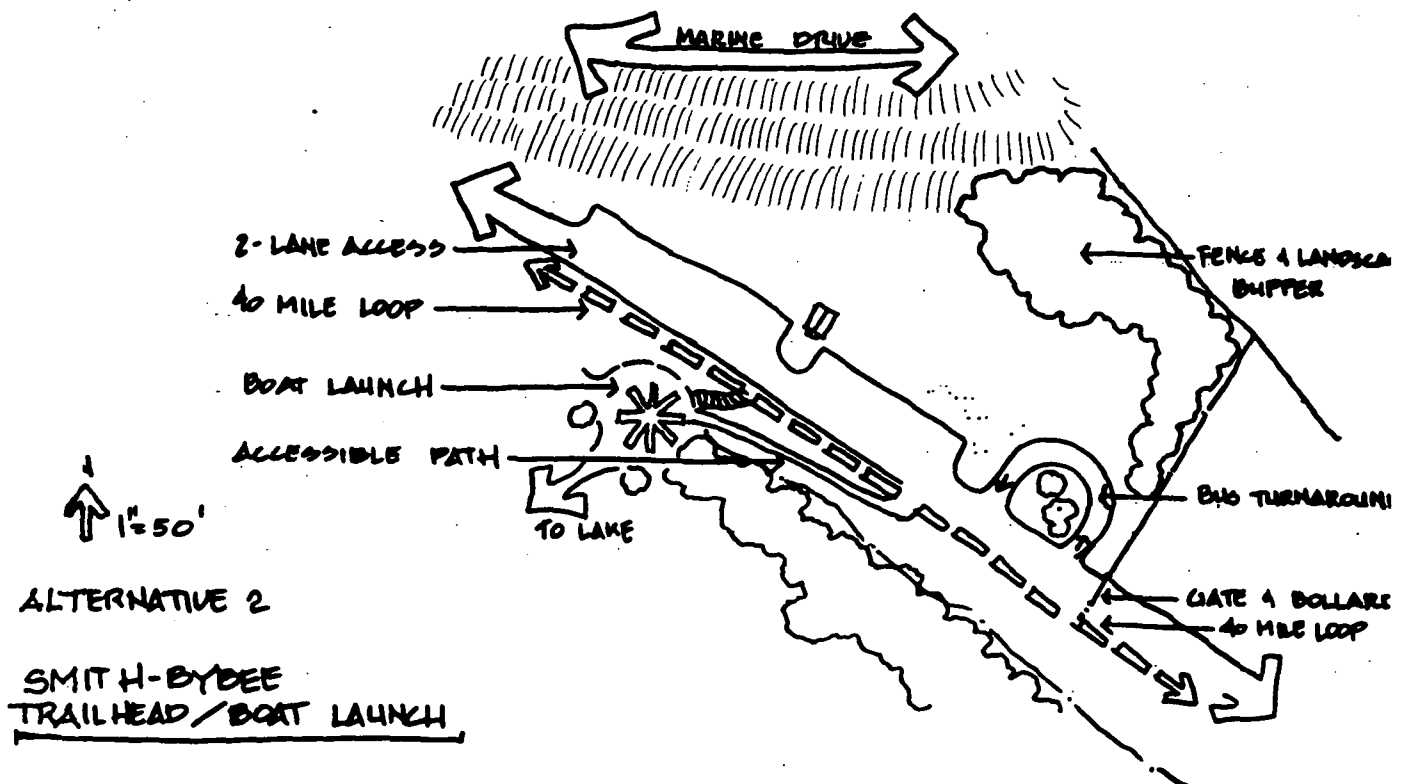
Trailhead Parking and Boat Launch Alternative 1

Alternative 1 (below) does a good job of accommodating the required number of vehicles, while also allowing for a landscaped separation from the 40 mile loop and the boat launch area. This should avoid the "shopping mall" effect. It does not leave room for much expansion however, and would be fairly expensive to develop.



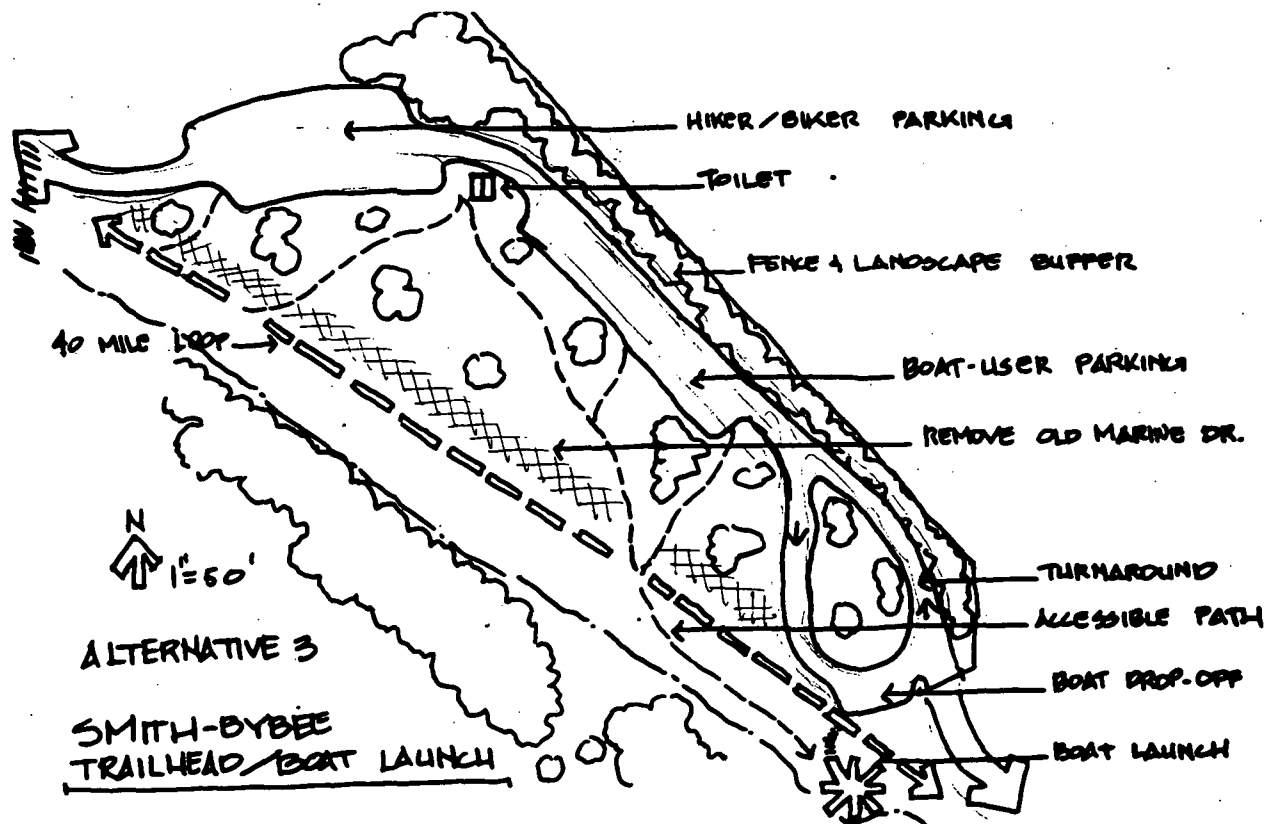
Trailhead Parking and Boat Launch Alternative 2

Alternative 2 (below) is the least expensive option, and allows plenty of room for expansion, but by stringing 40 vehicles spaces along the entry drive, it could tend to be a bit harsh aesthetically.



Trailhead Parking and Boat Launch Alternative 3

Alternative 3 (below) takes a fairly radical approach in that it calls for abandoning much of the existing road, which allows placement of the new parking as far to the north as possible. This opens quite a lot of "park" space in the triangle, and along where the Marine Drive used to be. It is a bit problematic for boaters however, in that they would need to walk some distance from their vehicles to the boat launch. Also, it would be the most expensive option considered.



Smith and Bybee Lakes Recreation Facilities Plan Permit Issues

- * Initial "pre-application meeting with Portland bureaus needed.
- * Triangle site is zoned for industrial use. Boat launch area within E-zone.
- * Water system may be required for irrigation and clean-up. Port has unused well in the area that could be tapped.
- * Port of Portland and the City both have landscaping requirements that may require irrigation.
- * Paving of parking area will likely be required.
- * Stormwater discharge permit required. Likely some treatment of existing pipes needed.
- * Wetland cut/fill permit from Division of State Lands and Army Corps will be required at the boat launch.
- * Building permit needed for toilet and kiosk structures.