

What Would the Community Like Included In the Center?

1. Consider a bike parking facility at the parking lot to serve the forty mile loop users as well as center users.
2. Important to be careful about expecting too much from multi-use spaces.
3. As learning facility it will require a classroom(s). Classrooms are different from meeting rooms.
4. Need covered outdoor space.
5. What is the classic interpretive center? Are meeting spaces appropriate? Can we justify ancillary uses when budget may be tight? What will be the first thing to be cut from the project?
6. As public education is being scaled back we are see educators turn to the agencies that handle environmental issues for providing environmental education.
7. Possibility of including summer day camp.
8. To teach about aquatic environment it will be necessary to have water in the classroom.
9. Type of exhibitry will influence building configuration. High-tech multi-media exhibitry will have different spatial requirements than traditional display cases.
10. Utilize the outdoors as exhibitry.
11. Suggest treating temporary exhibit the same as permanent exhibits rather than combining with a multi-use space.
12. Design "permanent" exhibits to facilitate some change to attract visitors to return.
13. Incorporate a small story-telling area or pit.
14. Locate classroom so as to imbue participants with sense of wetland environment.
15. Different age groups have different requirements for a classroom environment. Design classroom to be flexible to accommodate different user groups.

16. Consider how bus groups enter and orient to the facility. Consider a staging area for groups.
17. Provide orientation area.
18. Provide separate control/circulation for after hours use of meeting space.
19. Establish level of usage, project visitor flow and needs.
20. Site limitations (size and sensitivity) will govern maximum usage of facility.
21. Attempt to balance uses so that if people are turned away it is an equal percentage of each distinct user group.
22. Avoid damage to site and installations by design.
23. Consider car-clouting re: parking lot layout.
24. Provide drop-off at head of boat access trail to avoid having boats carried across parking area.
25. If budget is too small for "wish list" do you cut specific elements, downsize all components or phase construction?

What follows are some ideas about experimental or demonstration areas that can be developed in the immediate vicinity of the Interpretive Center. The areas could fan out from the Center, which would make them more accessible for students, or they could be nodes along a walkway near enough to the Center so that conveying tools, equipment, etc. to any of these areas would not be too burdensome. Since most of these areas will depend on water or use water in some way for the demonstration or experiment, pumps and plumbing should be part of the plan so as to provide water, either from the Columbia Slough or from Smith Lake, but definitely not City water. This source of water could also be used to irrigate other plantings at the fringes of these ponds and swales.

Virtually all of these ideas require some excavation so create shallow depressions for what is proposed. Grading at the time of excavation could create some additional habitats for native plants at the fringes of these depressions.

Many, if not most, of these ideas for demonstrations or experiments derive from elements of the Smith and Bybee management area. The difference between a "demonstration" and an "experiment" is basically that of trying to recreate an existing condition versus trying to test an hypothesis. Hypothesis testing could occur in any of these depressional areas and be something that could entail the use of the entire area or simply one portion of the area.

There is also opportunity with each of these ideas for interpretive signage that can tell a story about something related to the management of Smith and Bybee Lakes.

Varying Water Depths as Constraints on Wetland/Aquatic Plant Growth

This ponded area would require a sealed bottom (e.g. bentonite), with one (or three) weirs for controlling water elevations along the length of the pond. Certain plants grow in certain depths of water. The idea of this pond unit would be to focus interest on the importance and effects of water level fluctuations on plant growth using plants from the project area.

The Importance of Soil Quality in Wetland Quality and Revegetation

The second idea would be to have an area where you've altered the soil of the pond-wetland bottom with various soil amendments. One important amendment is compost from the Columbia Boulevard Sewerage Treatment Plant. At the plant there is a composting facility that uses sludge from the plant mixed with sawdust and it's an excellent soil amendment used to speed up revegetation of created wetlands. The compost speeds up plant growth and mimics the kind of organic conditions that you get in wetlands. You can have an area that has one kind of soil amendment and an area without the amendment with the same kind of hydraulic conditions for both.

Utility Wetland for Treating Stormwater Runoff from the Parking Lot

The third idea would be to use a treatment wetland for stormwater run-off, with various appropriate kinds of vegetation for that kind of facility. Regulated water levels would be desirable to support a variety of plants rather than just reed canarygrass, but you could plant things like cattail and rush, hard stem bulrush and other types of plant materials that are suitable for this type of wetland.

Simulate Ephemeral Pond

This is a unique feature at Smith and Bybee Lake; depressions that get filled with water and then all summer they evaporate and you get concentric colonizations as the water goes down by a variety of plant species, and then when it gets down to the bottom, you have tadpoles and catfish that are eaten by blue herons. So, there is kind of a feeding frenzy at the end. Part of the time it would be a shore-bird habitat.

Construct a Columbia River Sedge Meadow

Then, another kind of experimental area or plot would be to recreate a *Carex aperta*, Columbia River sedge meadow. This sedge grows in meadows in certain places in the system, and it's probably the elevation as well as organically rich soils that encourage the growth of this plant, and it out-competes reed canarygrass. At Corvallis, the SCS in their plant materials lab have found a way to germinate seeds from this Columbia River sedge and that's a story in itself. It'd make great signage, but if you could recreate that meadow on a small scale, presumably right up close to the center, you would actualize a type of restoration project.

Investigate Wapato Culture

Another idea would be to create habitat for the growth of wapato (*Sagittaria latifolia*). This plant requires certain conditions like fluctuating water levels and that's now rare in this system, but used to be pretty common, and there's a big story connected with wapato that goes back to the native americans and trading tubers. It's better than potatoes actually.

Herptile Habitat

Then finally, one area where you'd be looking at habitats for herptiles, kinds of amphibians and snakes, and what the elements are of this kind of habitat. Whether you can do this in a small area is worth some consideration.

Regarding Canoe Trails

Finally, my preference for a guided canoe trail would be to have this in the lakes themselves, with tall guide poles (perhaps raptor platforms as well) that would help the canoeist navigate through the dense smartweed stands in summer, and enable him or her to get to the narrow channel between Smith and Bybee Lake. There is a lot of opportunity for signage en route. Renting our rangefinders (very inexpensive any more) and compasses could turn some canoeists into navigators who could opt for a more interesting exercise in getting through the maze.

A VALUABLE RESOURCE THAT WAS UNDERVALUED

• Make messages complete sentences.

✓ • The lakes are an important but misunderstood part of our natural environment. Great idea! Deal with Fish survival. Make it multi-cultural. Definitely incorporate cultural relationships /use with and of area. decomposition and wetlands filtering issues also.

• I think that this interpretive center would be good for Oregon. It may be good for tourism and definitely for our education, it would be good for N. Portland and St. Johns community.

✓ • I think it's important to make the disruption on the habitat area extremely small. If we are not able to maintain the area as it is, then we shouldn't build the center.

✓ • If you want this place to be preserved, leave it alone. There are too many immature people to invite.

• Hiking trails are cool-flood lights on the trails would be really neat during the winter when it gets dark out really early.

• What do you mean by a "spiritual experience"? I think it is a misuse of words and could be misleading. How Will this be funded after it is built? Maintenance costs will be born by the public that uses it? Otherwise-good idea!

• A sensual and spiritual experience? Why do we need Smith & Bybee lakes anyway?

• How much is the restoration going to cost? Is a fee for entrance going to be charged? I think it should be free. I think there should be a gift shop.

• Was it once a part of the Columbia River? Was this really how it used to be and the way we want it?

✓ • It don't mean a lot to me.

• Get rid of the dam.

• What kind of ducks used to be at the lakes? How many species of animals have lived there and are now gone?

ORDINARY PEOPLE LEADING ORDINARY LIVES MAKE MISTAKES

- Historical perspective is excellent.
- These may be inescapable influences. The radio towers are not! Get rid of them if it has to go to the US Supreme Court!
- Who made the mistakes? People or organizations? Are they still going to happen? Tracing the effects of people on the lakes is very important.
- •Culturally diverse and get local communities of color involved in putting this together. Watch the cultural bias re Lewis & Clark.
- •All organisms modify their environment eventually to the point that a particular site no longer supports them. That's the natural succession through serial stages is all about. However, natural succession usually tends toward biological diversity. The human influence or cultural succession that has occurred in the S&B Lakes area has instead, moved the area away from biological diversity.
- We can and are able to learn about the area without doing much to the area.
- ✓ •This is a contradiction. This is supposed to be an environmental center, yet you are trying to make it a tourist trap.
- ✓ •A store is marketing our environment-it is sickening.
- You say it will be a year-round facility. I don't think that is a good idea. Not many people will want to have an outdoor experience in 35 degree weather.
- Are any of the specific causes of losing this wetland being held responsible? Like the large factories they are helping?
- How are you going to keep it clean so animals don't get to the trash? Signs or even garbage cans don't really seem to help. Also, what about vandalism?
- It has been destroyed, so we need to clean it up-how can we clean it up?
- How did the building of the landfill and railroads affect the lakes and wildlife?
- I have no idea, I don't understand.
- What is a weir structure?

EXPLORATION, EXPERIMENTATION, LEARNING

- Good idea. The towers should be removed by condemnation as environmentally inappropriate and a health hazard (electromagnetic radiation). The end of the Columbia Slough should be opened up to establish flow of water.
- Find a way to incorporate visitor ideas and suggestions. Solar energy and at least water power. Compost toilets and relate to decomposition in wetlands.
- The concept of restoration, that everything is habitat for something. When we "restore" something, we are further manipulating a manipulated habitat. Some species adapted to today's habitat will be displaced (e.g. blackberry eaters). What we restore it to? Or when do we restore it to? and Why? We are placing values just as the past manipulation had to do w/values. What is our value? Biodiversity, etc.?
- I liked the point raised by someone else about an opportunity for people to give suggestions for input to the center and its mission/ shape, exhibits, etc.
- What kind of connections, programs, space and money & equipment resources are planned for students to visit and learn and see and do science? Educational facilities, storage, labs, people, etc.? Tables for microscopes w/outlets, storage area for plants/best plots, sinks, on-line computers, small library, reading room?
- I think we should learn about these lakes and I feel that this is a good asset to the area.
- What kind of "hands-on " activities will there be? I have seen other informational center and boards with writing and pictures on walls are not interesting.
- Can we get rid of the contamination and the dam so it will be moving water again?

COMMUNITY "RECONNECTION" THROUGH WETLANDS RESTORATION

- These activities must be made accessible to people with disabilities, otherwise, they are excellent.
- No rentals-it would serve conflicting interests to have the visitor both experience nature and recreate (it can get loud).
- For local people the fishing here is not just sport, it is basic to their livelihood and should be recognized and supported by interpretive exhibits. Make sure locals have input.
- A good ending (or beginning) to go out and enjoy the lakes environment--somewhat of a call to action.
- I think that this whole idea is a very good idea. At this time so much of nature is dying off due to man-made inventions, and I am happy to see that there are other very different humans whose interests are in preserving nature.
- I've always thought that Smith Lake was a beach-it should be that, and an interpretive center.
- This will be a good feature to get residents and non-residents informed about the area. We can only do this if we are able to get people to come on a regular basis.
- How are you going to get people interested? Most have never heard of this before.
- What will be done with the dam and how it affects the water level and how will it tie in with the interpretive center?
- I think it should have a sports center because a lot of teenagers go and like to play sports. Also, they should have a cultural show once a week/month.
- Make the display interesting enough that people want to stop and read them.
- On your paths to the center, do you have any other way to get into the building so fire trucks and ambulances can get to people who are hurt? Also, how does it benefit us? Why should we be concerned about it anyway?
- Can it be opened to the people although it is contaminated and being a wetland?

suggestions from grade-school

water fountain
a glass room
look-out - estuary seaside - kids helped build
Microscope room/for samples
Water testing=how to do; water treatment info
Insect aquarium/terrarium
Petting and holding lab
 underwater animals, amphibians, insects; animal pelts?
Place where you can see animals in the water
Room for injured animals
Trails/look, then return and see what it was
Trail map
Place to look at plants
Plant display
 native plants
 introduced plants
 effects of what happens
Beaver lodges/beaver histories
Display of extinct animals
Classroom for teaching faculty
Table--build your own wetland
TV show about what to do and what not to do at the Lakes
Lab showing themes and how to save the lakes
Film strips of what happened and why
History (S&B) room
Library for research/info on area
A room on how to keep our habitat clean
Recycling center-also recycle along trails.
A room for endangered species
Underwater animals
Smithsonian Rain Forest show
See the site=inside a tree for a day to see how it looks from their perspective
Billboard showing native and non-native species
Telescope in tower - birdwatching and animal spotting

Boats
Kids playroom
Samples of life up close
Weather room
A place to learn about the habitats
Animal skulls and bones
Audio about earth and animals
Snack room/hall
Auditorium to create animal shows and habitat info
Gift shop = educational items
S&B posters with animals on it
Bathrooms with toilets outside the building
Natural, not a wall
Touchy-feelie
Open to the outside
Be a part of nature