# Memorandum

#### 19 May 1994

TO:

Smith & Bybee Lake Interpretive Center Committee

FROM:

David M. Yamashita

RE:

Notes for the 17 May Meeting

#### The attached packet includes:

- (a) a summary of comments from the last meeting -- first two pages;
- (b) comments from Roosevelt High School students pp.1-4;
- (c) comments from George Middle School students -- pp. 5-6; and
- (d) ideas for projects on the grounds of the interpretive center -- last two pages.

We have made one change in meetings -- the 31 May meeting has been cancelled and the next meeting of our committee will be on:

Tuesday, 14 June at 6:00 PM at the St. John's Community Center.

A public meeting will be held on Tuesday, 28 June from 7:00 - 8:30 PM at the St. John's Community Ctr. Also, we are planning a canoe trip on the lakes on Tuesday, 7 June at 4:30. Everyone has been contacted about this trip. I'll be sending more details later. Call me at 823-5120 if you have any questions.

Since the last Advisory Committee meeting, three presentations were made to school groups using the same material and format as the last meeting. Two groups at Roosevelt High School totaling about 85 students and a George Middle School group of 35 makes about 120 students reached about the project. This was effective both as a way to get more ideas from the community and as an outreach to St. John's families. A compilation of comments from the Public Forum and these three school presentations is attached. Also attached is a list of ideas for outdoor exhibit/experimentation projects generated by team member Stan Geiger of SRI Shapiro. Please note also the revised meeting schedule attached!

#### ADVISORY COMMITTEE DISCUSSION

- I. Road versus Boardwalk for canoe access at Interpretive Center side of Lake:
  - 1. Management Plan has higher priority for wildlife and resource than recreation.
  - 2. If we build road we will end up with cars parked along it.
  - 3. Distance from the parking lot is about 600 feet. This is a long portage. Perhaps we could provide specially designed buggies as a low tech solution.
  - 4. There should be a place for canoeists to tie up and go up to the Center from the water.
  - 5. Important to do the least impactful solution.
- II. Canoe trail cut into landscape (reed canary grass meadow) near center versus "trail" with markers (something like a channel marker) with interpretive material which guides visitors around lake or to Bybee Lake:
  - 1. A canoe trail close to the Center would provide a visible attraction and an additional interpretive experience.
  - 2. Such a trail would be about 12' wide by 5' deep. It would have fluctuating water level and be dry at the driest part of the year.
  - 3. Construction of such a trail would require permitting through all the agencies responsible for wetlands. It would be necessary to demonstrate that there is no viable alternative to accomplish the interpretive goals.
  - 4. Is it appropriate to create a canoe trail in this reed canary grass meadow? What problems might occur with undesirable plant growth in the channel?
  - 5. There would be more varied experience in a trip to the mallard pond. The reed canary grass lacks variety.
  - 6. Canoe trail would be likely to be dry at time of peak visitor use.
  - 7. Remnant channels already exist. Why not make use of them?

8. A trail designated by markers out in the lake and making use of remnants of old sloughs, could be divided up into various length loops allowing visitors to enjoy complete experiences with different time requirements.

# . III. Site Planning In General

- 1. Good idea to make entry sequence move visitors through more of the landscape (rather than along the slough) to prepare them for the content of the Center.
- 2. Planting in the parking lot should be designed to maintain visibility to avoid car clouting problems.
- 3. Need varying length trails and covered outdoor areas.

# IV. Building and Cost Estimate

- 1. Liked the dichotomy of man-made versus natural sides of the building.
- 2. Concern about materials and articulation of the public side of the building. Don't want to see something too reminiscent of the industrial edge.
- 3. Essential to have cost estimate information for next Public Forum. Combine presentation of costs with a description of funding sources. Phasing could be part of the overall funding strategy.

# 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 are 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?

<sup>\*</sup> these suggestions were taken from the Public Forum and two Roosevelt High School presentations.

#### 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 is 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 George Middle 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

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 catrish 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-ompetes 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 (Sagitaria 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.

Meeting1: Orientation and Visioning	Tuesday	2/22/94	5:30-7:00 pm
Meeting 2: Program Confirmation	Tuesday	3/15/94	6:00-7:30 pm
Meeting 3: Public Forum	Tuesday	4/5/94	7:00-8:30 pm
Meeting 4: Preliminary Floor Plan (space plan)	Wednesday	4/27/94	6:00-7:30 pm
Meeting 5: Rough Sketches, Space Models	Tuesday	5/17/94	6:00-7:30 pm
Meeting 6: Draft Report Review	Tuesday	6/14/94	6:00-7:30 pm
Meeting 7: Public Forum	Tuesday	6/28/94	7:00-8:30 pm
Meeting 8: Final Report Decision	Tuesday	7/19/94	6:00-7:30 pm
Meeting 9: Recommended Site and Building Concept	Tuesday	8/9/94	6:00-7:30 pm