

## Stakeholder and Public Meeting Comments

### Troutdale, Cascade Locks, and The Dalles Monday, May 9 – Wednesday, May 11, 2005

#### General & Miscellaneous Comments

I like a lot of what you've shown

- I think you've done your homework
- ODOT should commend you

Like the presentation

This is logical and makes total sense

Make sure to articulate who the groups are (Level 1, Level 2, etc.) and what their role is in the project  
Continue to emphasize what we've been doing since the last meeting:

- A lot of work going on
- Not a large lump of down time

Public input is often scanty

Interest not always there when the meetings are

Interesting features as you drive through the Gorge

Is this still a military highway? (June answered Yes, why it was built initially)

What it looks like to me is you're going to spend a lot of money to do something we've already got. I'm all for a safe highway, but you've already got a highway. Gorge Commission has double standards, won't allow us to build on our own land. Already have a good highway, don't agree with spending more money on this.

Is noise abatement an issue?

- Not a big one

Use sound walls as a feature?

Incorporate Noise Reduction

- In urban and recreation areas particularly
- Use vegetation

I'm a recreational user of the gorge and within 500 feet of I-84 the noise is awful.

Noise mitigation might need to be included.

Michael from OBDP: the problem is that typically noise walls conflicts with views, access, etc.

Emphasized need to brighten up the road at night, in heavy rain conditions, etc.

Lighting is an issue – corridor is very dark

Lighting is a major issue – could be its own goal – improve

Somewhere in document make reference to Lewis & Clark Trail and Oregon Trail Protection

Why don't we have the “no semi-trucks in the left lane” rule through the Gorge?

- Keep trucks in right-hand lane
- Move freight and garbage to the rails
- No more triple-trailer trucks

Acid Rain/Bike Path

Alternate route

Provide for bikes within right of way

Statement made on longevity lifespan of structures

### **Comments on the Vision Statement**

We're not going to sacrifice safety, but aesthetics are important.

- Want to compliment safety with aesthetics while in no way compromising safety.
- Folks react differently to this issue, touch it and move on.

Think Safety

Like that the word “safety” is stated up front

Safety should be Bullet no. 2

What is meant by “Protected Areas”?

The I-84 NSA Guidelines should serve as a model for....

Change “Protected” to “Designated”

Clarify “Protected” Bullet Point #2

Combine Bullets 2 and 3?

“Move Bullet 2 to end?

a model...” might move to the end, what is this saying?

Model – Not Interstates Only.

There aren't too many freeways that are rally scenic.

Most scenic highways are not interstates

Ending “tag-line” should be the first bullet point

“traveling through...” should be at the top of the list – this statement says it all.

“traveling through...” is short and sweet

Last bullet is too poetic

- “Journey is the destination”
- “Journey is the experience”
- Emphasize that the Gorge has the “feeling of being in a special place”

Emphasize the region rather than the CRGNSA alone

We are more than the NSA, there are cities, urban growth areas – move this statement to the bottom.

Historic should be an adjective

Add “river” to the list in bullet point 4

I-84 blocks access to the river between Troutdale and the Bonneville Dam

Recapture the access that has been lost

### **Comments on the Goals**

#### **Goal A – Safety**

Appears that goal A & D are the same thing

What is the “Strategy” isn’t the strategy the NSA? As in D?

If it doesn’t meet the strategy plan – then do we sacrifice safety?

Needs adding to Goal A-Enforcement/Education

#### **Goal B – Ongoing functionality**

Accommodate increasing traffic

Consideration of other modes of transportation and environmental mitigation for acid rain

Alternative Routes

A lot more traffic on I-84 now than it was originally built to accommodate – freight, passengers.

#### **Goal C – Continuity**

Avoid “cookbook”

Include signs to list as a distinct element in Goal C

Goal C: should include signs

East and west have different natural settings.

One color may not work at both ends

One color would be monotonous and potentially dangerous

Multiple colors create whimsy and interest

Open the palette to respond to different locations (consensus from entire group)

Gorge-wide consistency could decrease cost

Stairway at Eagle Creek is painted with Permeon to attempt to blend into the surroundings as much as possible (June C.)

Managing continuity and flexibility at the same time is a heck of a challenge.

- Need both: Connectivity between mountain and river.
- What kind of connectivity do you want? Don't want too much.

Balancing of continuity and flexibility.

#### **Goal D – Natural landscape and Historical context**

Don't lose potential for emphasis on interesting, man-made structures.

- Scenic does not have to equal natural.

#### **Goal E – Resources**

Is “protecting” recreational resources conflicting with the limited access Interstate.

Needs more emphasis on cultural

Perhaps a goal dedicated to cultural use mixed in with another goal

Consider historic resources

Must protect the HCRH

Add the word “historic” to Goal E

#### **Goal F – Access and Economic Development**

Should include Multnomah Falls

Consider the scenic resources leading to tourism

Tourism is a big part of this area, so want safety and aesthetics.

How does access and this strategy relate to planning to mitigate terrorism; scanning of trucks?

Provision for pedestrian access

Provide for bicycle and pedestrian access

Pedestrian, vehicle, fishing/recreation access

Legalize parking on wide/safe shoulders to provide access to beaches, historical sites, etc.

- Fisherman at Moffett Creek

Create bicycle/pedestrian path at I-84/River level

**Goal G – Implementation**

Inventory Discordant Features

- Develop action/priority plan
- “Individual” projects?

Replace with “future” or “all future”.

Three components to safety: engineering, enforcement, and education

This strategy doesn't seem to be looking at the second two

For example, the increased traffic from a casino has not addressed the corresponding need to increase enforcement

**Comments on the Overall Design Objectives**

Elements are visually aesthetic throughout Gorge area – Change with landscape

Form, line, texture, etc. – used really well in Glen Wood Springs – could be used in the Gorge  
F, L, C, T – add safety.

Don't let continuity lead to boring mediocrity.

- Allow flexibility

Big, monotonous designs that don't occur in nature aren't good.

Like clever design that is not too over the top

- For example, the images of Mt. Hood in the screens at Hood River

Can't support “One Style”

Situation/location needs to dictate design

“observer's eye. . .”, then use “vertical features” as an example

Replace “cliff” with Gorge

Arches should be a part of any design development in the corridor.

Arches are a man-made facility that does not “blend” with the landscape

Replace “concrete and steel” with “structures”.

“Gorge-wide consistency” needs to give man-made beauty equal consideration as natural beauty

Color palette should respond to east/west colors

Develop three color palettes and transition approaches/locations

Use harmonizing earth tones

Remove “dark” and just emphasize earth-tones

Harmonizing with surroundings is the most important objective

Avoid the “House O’ Many Colors”

Remove the word “dark” and just say “earth tone colors” or “harmonizing earth tones”

Dark is what people don’t like about the Permeon painted stairs at Eagle Creek.

#2 Bullet point – Not “Design” use “Tone” – “in order to provide visual unity”

The Dalles re-did a bridge with decorative salmon pink details

- it is ugly and blocks views of the river
- shown on page nine of packet in the section on interstate bridges

Texture – formliners can look too formulaic

Avoid the “basketballs” look (US26/Sylvan)

“Texture and color” statement more closely matches responding to the varied Gorge landscape

I’ve never been asked about Highway Textures – This is like picking out an outfit

Develop a neutral texture

Avoid texturing used on US-26 West of Portland

Avoid monotonous design

We are not texturing the roadway surface

Avoid bridge “building façade” in The Dalles

Connect I-84 projects with opportunities to re-connect HCRH segments

How do you complement the HCRH?

Don’t fake it

New Overall Objective >> address enforcement

- Ability for emergency vehicles to cross over
- Volume of enforcement appropriate to traffic levels
- District goes from Bonneville to Boardman
- Consider enforcement during planning for facilities (Casino)
- Maintain and improve access for accident and enforcement responders
- New objective regarding enforcement, e.g. emergency crossovers
- Accessibility and maneuverability of law enforcement

“Provide connection” changed to “not a barrier”

Connection of mountainside to river

- Reads as if it is to be done at the same time. Is this the intent?

Economics included in Vision and Goals, but not in the Design Objectives

Hard to visualize objectives

Create a gateway

“Support the development and maintenance of...” is the most important objective.

Emphasize the river as the key resource to “facilitate the enjoyment”

Enter “river” into sentence on 2<sup>nd</sup> page, 4<sup>th</sup> Objective

Add “cruise boats” to last bullet point

There needs to be a place to dock cruise boats below Bonneville Dam or near Multnomah Falls

### **Comments on the Bridge Features**

One of the major forces driving this project is the opportunity to replace these bridges

- We can really influence continuity with that number
- We should lead with this info; it’s why we’re here

Bridge architecture should be understated

- Emphasize the presence of the Gorge scenery
- Do not draw attention to the structure
- I-84 Bridges should be subordinate and therefore be boring and functional.
- Don’t be “overly visible” (FISH)

In Urban areas bridges should have a heightened level of architectural statement

- Like the artistic safety screen – Fish
- Subtle design features on safety screen
- Windsurfers as outline for safety screen on bridges
- Integrate screens into overall landscape
- Let architectural character of bridges/over-passes at interchanges change with communities, but maintain overall theme

Bridges should be different – like variation

Sandy River Bridge should have a large archway

Sandy River Bridge should not be boring – It’s a Gateway Bridge

Like the arched detail in the more contemporary bridge railings

Like the character of the Arch Bridge

Interesting character along bridge – near trails/ped/bike paths

Exit 10/Olympia Overpass – Concrete arch bridge replaced with steel arch

Blue Ridge Parkway Stone is nice

Integrate basalt stone walls with Colorado example of arched screening

## **Comments on the Roadway Edge and Alignment Features**

### **Median Barrier**

Median Barrier ideas look good

Come up with some medians that are attractive and safe, but that you can see over

Keep median barrier height low enough to maintain views of river

Should “urban areas” have lower barriers?

One design is too limiting

The design should be specific to needs

Hollow core concrete barrier

Colored concrete

Don't blend it into the landscape, keep it safe

Shield headlights vs seeing river – taller barrier preferred

Look at grade separation of travel platform to mitigate headlight glare

### **Roadside Guardrail**

Have variable railing systems to create interest

Channelized wood guardrails – blends into the landscape

Double galvanized guardrail is not scenic

Guardrail

- Partial to weather?
- Bolt connections can weaken
- Like the Galv. Darker rail

### **Railing Transitions and Terminals**

Transition Flairs should not cause additional fill that impacts other resources

### **Interchange Configuration**

Safety at Multnomah Falls

Improve the Multnomah Falls interchange

Casino at Cascade Locks will require a new interchange

- Current set-up can't handle it
- Tribe understands the uniqueness or the situation and the responsibility they have and are willing to work with “the gorge” where possible

Design entry and exit to prevent wrong way access

- Corbett as example

Interchanges should include separation between ramps and interstate

Don't make curves too tight for RVs and trucks

Full interchanges are needed in Cascade Locks

Cascade Locks needs more access to getting out of town for emergencies

During the fire there was congestion at the only two points leaving town

FHWA directive:

- Interchanges should be full and not have partial directions
- They need to be looked at as they come up

### **Comments on the Roadside/Right of Way Features**

#### **Vegetation Management**

Health of the entire system is important

“Require” native species rather than “encourage”

Mitigate exotic species invasion

Invasive species and unhealthy groves need to be addressed

- USFS is preparing an EIS right now to address invasive species
- However, people react more strongly to removal of trees than invasive species
- Scotch Broom, Ivy, and blackberries are pests and all need to be removed

Maximizing views is what will keep tourists coming to this area, which is what we depend on financially

There has to be a balance between keeping the tourists coming and keeping the interstate safe for daily drivers

People want views but don't think they want to cut down all the trees (including those people that say cut all the cottonwoods)

Open views of waterfalls

Vegetation management should identify the desired view corridors first and then develop a plan for opening views

Remove vegetation to open views

10-second window through trees to open views at 65 mph

View Corridors – open up selected locations, but do not take out everything

Selective clearing for views – both lanes

Not like a leisure “scenic byway”

Views are not distractive for drivers

Consider costs of maintaining vegetation

Consider winter maintenance practice

Need to protect habitat

Need to protect the osprey nests

Trees block wind, which helps safety on I-84

Wild fire in 2003 in Cascade Locks, wind funneled fire through community too quickly

Just implemented a fire management plan for Cascade Locks to prevent from happening again; in that plan we're asking ODOT to do some vegetation management (including clearing lower vegetation) Want these guideline to address this

Cascade Locks just completed a wildlife protection plan

- Asked ODOT to do thinning to prevent fuel loads
- Clearing out lower vegetation & other methods are parallel to creating “fire resilient” ecosystems

What does “fire resilient” mean?

Usually fire resilient means the fire sweeps through but doesn't crown

Vegetation management in the Gorge has been reactive – when a limb falls they cut it

Missing are the benefits of proactive vegetation management

Cutting trees in this area can be a long, difficult process

MP 50 – Charlie Sciscione worked for over a year to cut a few trees and open a view to Cascade Locks and Bridge of the Gods

It took a year get permission to cut 5 trees

Because of the scenic act nothing has been cut (in 20 years) and now our vegetation fire load is enormous

Each year, views of the river are reduced by growing vegetation

When this road was first built you could see the river and the waterfalls and speed limits were 70mph

As our population ages, we need to be able to see these views without having to walk to the water

Open views for senior citizens

Can't see water – Multnomah Falls

Redundancy on KVAs?

Wordsmith #2 & #4 into one item

## Viewpoints

Viewpoints and Rest Areas are most important

Do all views need to be accessible from both eastbound and westbound, or can some be accessible from east and some from west?

- That's contradictory with where we've been heading with full directional interchanges.

If you open up some of these areas to views through vegetation management, the need is somewhat satisfied because they can see the view and don't need to pull off

Wyeth is a potential opportunity, but it wouldn't be just a viewpoint it would be a recreational access area, rest area

A lot of rest areas here that aren't rest areas, they are state parks

Two conversations – where we can add Wyeth and Chicken Charlie Flats

Where can we work with state parks to add?

I think Oregon has established a good rep for their rest areas

We get mixed reviews on our rest areas

We need more viewpoints which will be a challenge

There are really two separate conversations here:

- Are there other opportunities for viewpoints/rest areas?
  - Due to the geology and geography, we may be stuck with what we have
- Need to be located in areas where terrain allows rather than indiscriminate filling

Major tourist corridor as well as scenic highway

More restroom facilities

Separation of lanes would enhance views – vertical

There are not enough places for trucks

- Memaloose is filled with trucks every night
- Parking lots needed at east end of Troutdale Airport
- Providing access to the Sandy River Delta
- Multnomah Falls parking lot needs reconstruction

Create a parking lot at the east end of Troutdale, on the west bank of the Sandy River

Create a pedestrian bridge over the Sandy River

Improve parking capacity at Multnomah Falls

Add views of “cultural features”

- Specifically Bridge of the Gods
- “Man-made” Landmarks

**Fences**

I like the less visible, transparent (mesh) fences

The color of the poles should blend with the background, whether they are brown or green

Add safety mitigation

Should have provisions for fishing access along the westbound lanes

- ADA accessibility
- Dalton Point in particular

Likes the two beam wood fence

The wood fences speak to an agrarian history and the gorge doesn't have a history of cattle, animals, etc. and fences to keep them off the road

The wood fences require more maintenance, they can be expensive

**Comments on the Operational features and Support Facilities****Rock Fall Mitigation**

It is really an issue that needs to be determined location by location

Fatal accident on I-84 involving rock-fall onto westbound lane and a couple on a motorcycle; passenger died

Shotcrete might be effective for rock fall mitigation, but does not look good

The worst rock-fall locations have already been addressed by ODOT

- One at Hood River will be worked on this summer
- Those that haven't been addressed aren't high priority from a hazard point of view

There are ways to use screening without the typical chain link, ugly stuff

Fences and retaining walls need to blend in

Use of formliner systems to create desirable patterns and textures that are affordable

**Wildlife Crossings**

Function for wildlife

Don't let connection/access across I-84 prevent blocking large animals

ODOT region 1 and USFS are finishing a wildlife crossing "hot spot" inventory

Where culverts are not functioning right, use a bridge

In the design, accommodate the natural processes of hydrologic flow and be self maintaining

Big River – be strategic

Wildlife and fish passages are expensive

Animal overcrossing would require fencing, which is ugly

Use small holes on medians to allow animals through?

Medians that allow for animal passage (cutouts)

Underpass on the historic trail just west of Cascade Locks on the bicycle trail is an underpass for bicyclists

- How many animals use that?
- Could it serve both purposes?

There is an underpass just off the Discovery Center grounds here that runs under the train tracks

Why don't we see deer crossing signs?

Safety from deer at Rooster Rock

There are deer, elk, etc frequently on the highway (especially near Rooster Rock).

### **Retaining Walls**

Geo-webs

- Can look nice when they grow
- But weeds also grow there and that means maintenance
- That means money.

Likes the Geo-web retaining wall in green locations

Over-steepened in rocky locations

I like the use of boulders, and harmonizing colors and natural looking textures.

I don't like the smooth, geometric, grid looking walls. They belong in a city (referring to the bottom right image on wall texture board)

Multnomah County has stated that rock retaining walls are bad practice:

- Why are they alright on the highway but not on private property?

### **Signs and Gateways**

Create gateway treatments or signs at the Sandy and Deschutes Rivers

Historic sign to announce Bridge of the Gods

Use signs to point out views

## Design Charette Comments

### Hood River Inn

Thursday, May 12, 2005 – 2:00 to 5:00pm

4 groups, each representing a module-

- Bridge Features (Ralph, Bradley, In-Tae)
- Roadway Edge and Alignment Features (Lucas, Louis)
- Roadside/Right of Way Features (Mandi, Erin)
- Operational Feature and Surrpot Facilities (John, Lindsey)

### **Comments on the Bridge Features**

Incorporate arches where bridges cross natural features.

Use architectural face beams.

Use rock forms.

Examine preferential icing.

Use natural rock on abutments (local partnerships).

Use vegetation to conceal abutment slope.

Break the horizontal line of bridge structure.

Avoid median piers.

Create abutment slope that are natural in appearance.

Bridge features should echo features of the scenic highway.

Sandy River bridge – 12-foot WB pedestrian/bike (separated).

Uneven broken vertical forms (buttressed and broken form).

Basalt column forms (5-sided).

Gateway bridge should blend with natural environment; should not be self-referential.

Mainline bridge – doesn't distract.

Overpass designs can reflect the community interest in the context of the guidelines.

Sandy River Bridge designed in context of the surrounding uses (traffic, trails, boats, fishing); fully integrate all uses.

Bridge not self-referential (reflect or foreshadow coming experience).

Sign as icon (architectural elements integrated with bridge project).

Bridge should disappear; focus should be on the scenic area.

Sign proposal exists (ODOT).

Gateway for traveling public and pedestrians underneath.

Reflect features of scenic highway.

Visual cleanliness (conceal services).

Lengthen spans?

Varying hydraulics – explore natural pier protection.

Bridge design should be shaped by corridor design, not vice versa. Work out detail first, then apply to this bridge.

Use combination abutments if appropriate.

Sloped abutment opens views.

Avoid “too much” flexibility to overpasses.

Preference for bridge rail with the picket look of the HCRH.

Sandy River – span optimization (lengthen spans).

Maximize barrier openness.

Texturize surfaces where possible.

East-bound experience different from west-bound.

Combination abutments integrated into landscape scheme. 2:1 slope also can be landscaped.

Bridge rail should be open and non-disruptive to the viewshed.

Monuments to draw attention to natural features.

Introduce arch forms in rails.

Sandy River – minimize piers in water.

Strong historic references in a modern vocabulary.

Color that blends into natural landscape.

Consider green as an accent color.

Slight preference for combo-abutment.

## **Comments on the Roadway Edge and Alignment Features**

### **Median Barrier**

Splash over the median – pavement treatments would be preferable.

Is a shorter barrier just as safe as a taller barrier?

Put a drain in the median (trench or other)

Does attached rail style median barrier meet TL-4?

Consider views of creeks and other crossings

42-inch barrier height may distract drivers because they will be trying to see the river over it.

Median color should be brown, but reflective.

ODOT has done a color study that is available for review.

Is paint a maintenance issue?

Explore other methods such as stain, etc.

Aging process reduces reflectivity and darkens the color.

Create consistency (a theme) in color; colors should be tied together throughout features.

If colors transition to blend with surroundings from west to east end of the Gorge – where would the transition occur?

Bridges could be used as transition points.

Will darker colors for median barriers compromise safety?

Use colors that are dark enough to blend with the landscape but maintain visibility (add reflectors).

Texture increases cost and affects safety and damage to vehicles. Caltrans: less than 1-inch deep.

A visually subordinate median may affect safety; nighttime safety could be increased by reflectors, such as a reflective strip on top of median that is not visible during daylight hours.

Solar reflectors are not visible during daylight.

Guidelines should call for a median barrier that provides high safety performance during periods of bad weather.

Within road corridor color should be consistent throughout the Gorge.

Other elements outside the roadway (walls, rockfall, etc.) can reflect the immediate landscape setting.

Favor darker, rather than lighter, colors, but they must be compatible throughout the Gorge.

Prefer darker colors to lighter colors.

Maintenance of roadway markings will increase safety and visibility (daytime and nighttime).

Median barriers need to be consistent in color, height and shape throughout the Gorge.

Roughened, irregular texture for median barriers is preferable.

Moss growing on median would be nice if it was intentional and part of the design, and if it does not compromise safety; may reflect landscape transition through the Gorge.

Texture should not be an eye-catching feature.

Use irregular texture over repetitive geometric design.

- Roughened, irregular, and subtle
- No mimicry of rock
- Needs to be repairable.

Joints are not necessary

Identify key locations where headlight glare and water spray are an issue, and explore modifying the median barrier to increase safety.

Maintain a consistent line throughout (no differing heights for barriers).

If a safety issue is identified explore mitigation options that do not affect barrier height (like varying eastbound/westbound height).

Guideline language must include a process for review in special situations, and address how alternatives will be developed in those situations.

Custom pre-cast barrier may be an option

- Needs to be crash tested
- Depends on level of texturing, color, and constructability

### **Roadside Guardrail**

Guardrail should maintain an open feeling using open form and subdued color.

Use consistent weathering steel; not patchy, spotted color.

New standards (w-beam) are under development – these standards are higher than the existing.

Consider double rail if it can improve the view and is cost effective.

Color of guardrail should be compatible with the median.

Recommend weathering steel.

Accent guardrail with pre-cast masonry in key areas (scenic viewpoints, etc.) and where a non-deflective situation.

Explore alternatives, such as wood. Something unique, not off the shelf.

Wood does not need to be white, it can meet color objectives.

Where a more rigid guardrail is needed (also at off-ramps or other slow-traffic areas), use pre-cast masonry.

Double rail ties I-84 in with HCRH, and would be preferable. If this is cost-prohibitive, go with W-beam (weathering steel).

Color of guardrail should be consistent throughout the Gorge.

A cable guardrail design has evolved, may be useable in the Gorge. It is a possibility to use cable on riverside and at top of embankments, with w-beam on mountainside of the road.

The “one design” clause in design objectives may need to be revisited.

Allow an adequate shoulder for emergency parking.

Guardrail and median should match or be very similar.

Double rail and cable should be explored. If not feasible, w-beam is acceptable.

Wood posts are preferable to metal.

### **Railing Transitions and Terminals**

Terminals should transition into the landscape (backslope).

Use a consistent color palette among all elements – guardrail, transition, etc.

The form of the transition should be consistent with the bridge rail.

Announce crossing over creeks; subdued transition over roadways/rail line. Incorporate creek signs into the design.

Announce bridge approaches for safety (ice, etc.)

Railings on roadway and bridges need to harmonize.

Bridge crossings should be noticeable (use different railing), however transition should be smooth.

Bridge railings should be transparent when crossing scenic features (creeks, etc).

Consensus on objective to transition into landscape...

Railing should be as transparent as possible.

Line, color, etc. should remain consistent with roadside railing.

### **Interchange Configuration**

Interchanges should be consistent throughout the Gorge.

Interchanges – look to the Autobahn in Germany. Interchanges are much smaller than in US

Darker deck and/or railing could reduce ice build-up.

Bicycles must be considered in the design of interchanges.

Plant material should be consistent with surroundings.

## **Comments on the Roadside/Right of Way Features**

### **General Comments**

Three important categories to consider:

Safety

- practices
- chemicals

Statutes

- environmental preservation
- environmental codes
- city codes
- noxious weed ordinances

Stewardship

- (come back to this later as a group)

Treatment methodologies need to be explored in detail.

Make sure the guidelines are implemented. They need to change not just features, but the systems (agencies) that manage the area.

Agencies need to work together; glad to see this beginning to happen.

Guidelines should include visual references/illustrations for clarity.

ODOT needs to make sure stormwater management practices are consistent from project to project. Also consider stormwater impacts on landscape.

If guidelines are developed, they need to be implemented and maintained.

More people experience the Gorge from the I-84 than any other way.

Trying to hide the highway (screens, etc.) is useless – can still hear it.

Stewardship

The higher the degree of cultural landscape, the higher the maintenance and cost of maintenance

Include volunteer landscape restoration programs in the guidelines.

Education over enforcement – use a kinder, gentler approach and explain why guidelines are what they are

Educating people about the guidelines is critical and should include cost, resources, etc. The Discovery Center design process is a good example.

The weigh station at Cascade Locks is well architected and is a good example of how a weigh station should look.

Urban areas don't want to be left out. ODOT needs to apply consistent guidelines to urban and non-urban areas. Drivers don't know whether they are in an urban or non-urban area.

Chemical spray operators, maintenance crews, etc need to be on board, part of the design. Do some outreach to these people.

Create better legal access to the river for those going out to fish and recreate. Do some outreach to these people.

Guidelines should identify areas of restoration for fish and wildlife.

### **Vegetation Management**

Landscape to the north side of Vista house is an example of an area where re-vegetation is needed. The guidelines should address these and other areas.

Fire danger is a large part of safety and needs to be addressed in the guidelines.

Interchange at The Dalles uses native vegetation – keeps maintenance (cost) low and clues drivers to the natural landscape of the area. Promote this with the guidelines.

Vegetation management and maintenance should be a priority in the design guidelines. Maintenance costs should also direct design guidelines.

Guidelines should address removal (non just planting) of existing non-native vegetation/noxious weeds, such as blackberries.

Keep vegetation overgrowth off of the highway.

Balance is critical between vegetation management and viewpoints. Views are important, but habitats need to be preserved and views from Highway 14 and the HCRH should not be disturbed.

After the Cascade Locks fire, we've learned we need to keep the trees healthy. Good forest management needs to be written into the guidelines.

Guidelines should address native plantings for urban areas as well as for non-urban areas; be consistent with management plan.

Native vegetation should be native to the area of the Gorge, which will be different from east to west. Have different planting palettes for various locations.

Guidelines should include plant lists/planting palettes.

Promote minimum maintenance:

- No plants that require irrigation
- No plants that encourage weeds
- Plants that are low-growing
- No plants right up to roadway (clearzone)

Promote self-sustaining native species, such as wildflowers; reference *Wildflowers of the Columbia River Gorge* by Russ Jolley.

Remove invasive plant species.

Keep tall vegetation a distance from road edge. Transition from taller vegetation (trees are foraging areas) to shorter vegetation toward roadway. This keeps wildlife (especially larger) from jumping out onto roadway.

Guidelines should call for native vegetation whenever possible, including interchanges.

### **Viewpoints**

Should be a priority to open up the vistas

Many controversies involved with cutting trees and there are scenic area rules against doing so; make sure guidelines address this.

The Gorge is all artificial, man-made (dams, highways, etc.). Mother Nature tries to heal herself. What is the human role in this – to resist Mother Nature or to assist?

The best view spots are not always where they are planned. Where are these opportunities?

Preferable to limb trees from bottom up rather than removing them

There are many open areas (for viewpoints) to the east end, but the west end is forested and fragmented by manmade structures.

The gorge is not just an experience, it is also a system and that system need to be supported by the guidelines. Look at the context of the total Gorge/corridor:

- wildlife
- vegetation
- geology

View corridors should be in the sight lines of drivers

- Creates a longer lasting view and accommodates safety
- Drivers are not looking over their shoulder to catch a passing view.

Key questions: What are people looking for? What are they looking at?

When traveling the Gorge people want to see it.

One of the biggest complaints received by ODOT from the public is the loss of views along I-84.

When addressing strategic placement of view windows reference and build on the *Visual Corridor Inventory (1990)*.

Guidelines need to address management and maintenance of view windows. Identify a plan for maintenance and who will maintain.

Look at which views can easily (without cutting a lot of trees) be created on I-84, and which are more feasible from HCRH. If a view can be made more meaningful (safer, longer lasting) from HCRH, then find a way to move people to HCRH to experience.

Need pull-offs for key views and signage to identify what/where views are.

Viewpoints are especially needed eastbound.

Guidelines should require cutting the fewest trees possible. Look at long-view opportunities (driver's sightline) not just quick-peek windows.

Guidelines need to identify historical viewpoints and set a goal to re-establish these before creating new views.

Consult with biologists to determine the least impacting locations and sizes of view openings.

Focus on historic views, those that have 'always' been there/those people identify the Gorge by. Don't just open new views to have them.

Maximize the content of views - not just water.

Tourism dept. has a good inventory of the Gorge, use as a reference.

Guidelines need to address signage to identify features of the Gorge (waterfalls, trails, etc.).

Rock bluffs are just as important to view as water.

Views should be opened in driver's sightline, but without creating distraction. Don't place at tight curves or outside curves where driver would be looking in opposite direction of bend in road.

There is no cookie cutter approach to creating views, but there should be a consistent approach based on habitat.

Choose views carefully to minimize habitat impact.

Strategically thinning cottonwoods when creating views can help to make overall cottonwood stands healthier.

Guidelines need flexibility to allow for differences in communities/areas.

### **Fences**

New fencing may be installed from Sandy River to The Dalles.

Consider historical reference when selecting fence style.

Consider the purpose of the fence when choosing style – is it to delineate the Right of Way of for wildlife control? They will call for inherently different types of fencing.

Fences have been mandated by FHWA for access control (keeping off of highway), but there is flexibility for ODOT to determine where this is needed. Natural barriers, including slopes of 3:1, do not require fencing, but may still need to install it if people are attempting to access these areas by parking and crossing the highway.

Putting fences on public land doesn't make sense.

Can potentially use access control fencing as wildlife control fencing

Three-strand barbed wired fencing is the easiest to maintain.

Using only one style of fence may be a mistake. Fencing needs to apply to its surroundings. Guidelines should address this. Guidelines should not call for fencing where it is not needed.

Create an access hole in fences where we want animals/people to cross the highway (over/under crossings); integrate fence with wildlife control. Consult with biologists to determine whether wildlife will use crossings shared by humans.

Consider using blackberries as ROW control where they are existing, they are efficient. It makes no sense to remove them to replace with a fence.

Guidelines could address using native vegetation (there are native blackberry varieties) as access control. May require fencing while they grow in, but this could be a good long term solution.

Fences should be invisible. Glad to see fencing removed where it is not needed.

Fencing needs to be maintained.

Rest areas/viewpoints/interpretive areas could use fencing for character.

Allow strategic openings in fencing to allow pedestrians through, but keep ATVs out.

Primarily fishermen who are parking roadside to access the river.

Existing blackberries effectively function as access control.

A low rock wall may control some access without blocking views (Chicken Charlie flats). Attractive fences vs. successful access control.

White tops on fence posts are used to delineate the fence line through vegetation.

Wood fences can be attractive, but they provide limited access control and require high maintenance (fishermen burn for fires).

Few locations where fencing is proposed where it doesn't already exist.

Vegetation is important with mesh fences.

There are policy issues surrounding FHWA requirements for access control fencing. These need to be worked out before the guidelines can address fencing.

Guidelines need to allow flexibility in types of fencing to fit context.

### ***Comments on the Operational Features and Support Facilities***

#### **General Comments**

Assure good ideas are executed properly

#### **Rock Fall Mitigation**

Shadow rock into the line

Smooth cuts – no

Drill traces – no

Over blasting

Increase excavation to blend 3-D transform

Worker safety in context of rockfall

Maintenance for rockfall features needs safety considerations

Chia pet rock fall mesh treatment

Minimize visual impact of bridges

Place gabion in order to allow placement of soil and vegetation growth

**Wildlife Crossings**

Bridge over the landscape first – something larger than stream width

Keep the crossing open for landscape continuity

Use of wildlife channeling fence

Goal should be to keep wildlife off highway

Remove known forage, replace with less palatable vegetation

Use bridges vs. boxes (culverts)

Size of span increases with walls

Bridge should span the flood prone riparian as well as the stream for all wildlife passage

Use a natural channel bottom on all types

Not in favor of wildlife fences; can cause other problems

Create human/pedestrian passage too

Disperse to allow for natural procession

Overcrossings are too intrusive

When considering water culverts, oversize and add too for other terrestrial purposes

**Retaining Walls**

How much sameness vs. variation?

Irregular texture

Guidelines should use a small palette of color, with variation from the east end to the west end of the Gorge.

Retaining wall color should create harmony between the retaining wall and road barrier, and with the landscape behind.

Instead of large retaining wall, use smaller walls with landscaping popping up in between.

Retaining wall should be visually subordinate to the landscape behind it.

Cascade Locks – rock blasted texture carried into retaining wall structure.

Two choices:

- Retaining wall that looks completely natural and that is perceived as being part of the natural landscape
- Limited palette of manmade walls that are compatible with their setting

Maximum distance to the point of integrating the wall into the landscape

Use natural materials (boulders) placed in an irregular configuration

Match the character of land from rock selection

Walls should have character of the basalt bedrock

Tunnel under rock fall sources

Retaining walls along river should have vegetation growing within wall and minimal encroachment

Consider use bioengineering techniques to stabilize slopes before going to more (man-made) solution

Minimize the need for retaining walls – Bend Parkway for example; tie to the geology

Use low and at the road treatments

Integrate boulder walls into the landscape

Use natural materials as a façade to a more structurally-sound wall system

Create quality designs with sensitivity to the local environment