

Comments
Draft Environmental Impact Statement
Links At Half Moon Bay
Westport Golf and Hotel Destination Resort
Westport, Washington
Grays Harbor County



Prepared by



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In Re: Links at Half Moon Bay, Draft Environmental Impact Statement

Friends of Grays Harbor (FOGH), a Washington State 501c(3) nonprofit corporation, is a 100% volunteer citizens group made up of crabbers, fishers, oyster growers and caring citizens from throughout the Grays Harbor, the State and the Pacific Northwest. The mission of FOGH is to foster and promote the economic, biological, and social uniqueness of a healthy Grays Harbor estuary. The goal of FOGH is to protect the natural environment and human health in Grays Harbor and vicinity through science, advocacy, law, activism and empowerment.

Through building coalitions with other organizations, FOGH has filled a need in becoming a clearing-house for clean water information and leaders in the fight for intelligent growth practices that preserve the integrity of water quality and the rural character of the lower Chehalis River Basin and the Grays Harbor Estuary.

Friends of Grays Harbor (FOGH) is pleased to take this opportunity to provide comments on the proposed development of the approximately 350 acres of Port owned property. We appreciate the fact that the proponent has agreed to develop and present an Environmental Impact Statement (EIS). We are troubled however, by its apparent inadequacies. We trust that the City will agree that the version of the proponent's No Action Alternatives Analysis, for example, appears to be more of an attempt to backfit their own site selection process rather than the actual demonstration of practicability coupled with the least amount of impact to the wetland and aquatic environment. It is our opinion that the Draft Environmental Impact Statement is insufficient and no final or long range decision should be made based upon it.

A handwritten signature in green ink, appearing to be 'Arthur D. Grunbaum', written in a cursive style.

Sincerely,
Arthur (R.D.) Grunbaum
Member of the Board
FOGH (Friends of Grays Harbor)

Background and Fact Sheet

The proposed action involves a phased development of a destination resort including a luxury hotel, dining facilities, separate condominium-style living units and a Scottish Links-style golf course. The proposed action and a No Action Alternative are being considered for review under the Draft Environmental Impact Statement (DEIS).

The proposed location for this project is on approximately 350 acres in the western portion of the City of Westport (City). This property is described as having approximately 2,600 lineal feet of Pacific Ocean frontage and approximately a mile perpendicular to that frontage.

FOGH recognizes that a significant portion of this project encompasses a vanishing interdunal area and its many wetlands lying adjacent to the primary dune that separates the ocean and the subject property.

Wetlands play a critical role in sustaining the coastal economy and shoreline environment supporting and nourishing fishery and marine resources. They also protect the Nation's shores from storm and wave damage. Coastal wetlands contribute an estimated \$5,000,000,000 to the production of fish and shellfish in the United States coastal waters. Yet, 50 percent of the Nation's coastal wetlands have been destroyed, and this proposal suggests a further likely decline in the near future.

There is a clear link between water quality and land use activities along the shore. Coastal and shoreline planning and development control measures are essential to protect water quality. Richard Horner and Christopher May ("Watershed Urbanization and the Decline of Salmon in the Puget Sound Streams", **Salmon in the City** 1998 conference proceedings p.22) point out that "at very low levels of development there appears to be a rapid decline in biological integrity as well as the physical habitat conditions necessary to support natural biological diversity and complexity." They cautioned that when as little as 5% of a local watershed was covered with an impervious cover, key salmon habitat is lost.

The waters of Grays Harbor Bay and the lower Chehalis River basin are imperiled and have been added to the EPA 303(d) list for fecal coliform. At present, this is primarily due to the point pollution caused by the wastewater treatment plants of Aberdeen, Hoquiam, and Cosmopolis and the industrial outfalls from pulp and paper industries. The unnamed Westport creek (locally referred to as Winter Creek) was part of the recent Grays Harbor Fecal Coliform Total Maximum Daily Load Study (TMDL Study). Water quality measurements were made at a location between Second and Sprague Streets. It was determined that it would require a 92% reduction of fecal coliform in order to meet water quality standards. "Winter Creek" is in close proximity to the interconnecting wetlands of the subject property and the Westport Light State Park.

1) Please discuss the overflow potentials of these wetlands and the drainage patterns that could be exacerbated by the redirection of winter rain waters on the golf course.

Background and Fact Sheet Continued

The estuary supports a significant aquaculture industry that contributes to the economic base of the County. Salmon fishing, crabbing, commercial offshore and inshore vessels, processing plants and charter boats provide over 5,500 jobs. Grays Harbor Bay and Willapa Bay produce approximately 3.6 million pounds of oysters generating revenues exceeding \$20,000,000. These industries are directly affected by water pollution. Presently, the State Department of Health has established a decertification line that stretches across Grays Harbor Bay at approximately midpoint. All waterways and tidelands east of that line to the Chehalis River are “decertified” and not available for direct oyster or shellfish harvesting. In addition, whenever Aberdeen, Hoquiam, or Cosmopolis WWTPs bypass in excess of a million gallons of raw sewage, the oyster beds are closed for one to two weeks. Of considerable concern to the existing aquaculture industry is the possibility that the decertification line would be moved further West or be so impacted from development from the West, that further lands would be taken out of production. The Department of Health shuts down the oystergrowers to commercial harvesting whenever the fecal coliform rate of sampled water is in excess of 14 colonies per 100/mg. One hundred (100) colonies is the threshold for other activities.

- 2) Please discuss how much untreated runoff would be necessary to exceed the threshold of safety?
- 3) What effect would this have on present users of the project area and describe present water quality monitoring?
- 4) What effect would this have on surfers and other water users of the ocean and Half Moon Bay?

Because global warming may result in a substantial sea level rise with serious adverse effects in the coastal zone, coastal states must anticipate and plan for such an occurrence.

Land uses in the coastal zone, and the uses of adjacent lands which drain into the coastal zone, may significantly affect the quality of coastal waters and habitats, and efforts to control coastal water pollution from land use activities must be improved.

It’s been only 110 years since President Benjamin Harrison admitted Washington as a state on November 11, 1889. In that 110 years, we’ve grown from an 1880 census population of 75,116 to a burgeoning population of over 5,757,400.

Along with that population boom we’ve seen water degradation due to pollution, salmon population declines because of habitat loss and unwise land use practices, a loss of approximately 50% of the Grays Harbor wetlands, wildlife extinctions and an increased threat to human health and welfare due to inadequate enforcement of existing laws.

It will take the leadership of committed individuals, enlightened government officials and bold governmental agencies to correct these losses. The City of Westport can be one of those agencies. Through forward thinking the responsible official reviewing this proposal can be one of those wise ones who history books thank because their legacy encouraged an area that protects its natural marine resources, natural sandy beaches, irreplaceable shorelines and critical wetlands.

Background and Fact Sheet Continued

This offers us the opportunity to assure that long-term survival goals are achieved for generations to come rather than satisfying short-term profit returns for a select group of investors.

The Fact Sheet, page i of the DEIS, under Location states “This property has approximately 2,600 lineal feet of Pacific Ocean frontage.”

5) Please define the phrase “Pacific Ocean frontage” and describe frontage property ownership.

At present there is a cement pedestrian walkway that leads from Westhaven State Park and follows the shoreline to Westport Light State Park.

6) Who owns the property upon which the walkway is placed?

7) Who owns the property west of the walkway and to the ocean’s edge?

The Fact Sheet, page ii of the DEIS states “Other Potential Approvals include public utility agreements and property easements.” These potential approvals may have significant impact on the viability of the project.

8) Please explain the extent of the approvals and with whom they would have to be made.

9) Please explain the impact to the public interest if the easements involve the Department of Transportation or State Parks and Recreation.

The Fact Sheet, page ii of the DEIS lists approvals required from the City of Westport, State of Washington and Federal Government, but doesn’t refer to any approvals from Grays Harbor County.

10) Please comment and list the permits that would be required by County rules and regulations.

11) Please discuss the appropriate overlay of such regulations, including zoning, and how each of these would affect such things as the Grays Harbor Estuary Management Plan (GHEMP), Grays Harbor Shorelines Management Program to name just two.

12) How will this proposal overlay to the principles promulgated by Regional Planning?

13) How will this proposal overlay to the principles and mission goals of the Port of Grays Harbor?

Executive Summary

The Executive Summary ES-1-4 is woefully inadequate in its description of the Preferred Alternative.

According to the summary, page ES-1 “The entire project will be constructed in two phases, with the estimated total buildout being in the Year 2011. Phase 1 will include a 200-room hotel, convention center facilities, approximately 40 condominium units, and the 18-hole golf course. Phase 2 will be an expansion to include 200 additional hotel rooms. Additional condominium units and potential development of retail space will occur as markets demand.”

This summary does not provide sufficient information to help a reader make an informed decision on the impacts the project might have to the environment. The description requires the reader to presume, for example that there will be other facilities necessary to achieve the luxury status. It is described as 200 room luxury hotel, but there is no description of footprint or height of the building.

- 14) Will this include a restaurant?
- 15) How many people will the restaurant seat?
- 16) Will there be a separate breakfast facility?
- 17) Will there be a separate lunch facility?
- 18) How many turns are expected to these operations?
- 19) What is the expected water usage for a luxury hotel and restaurant operation?
- 20) Will a laundry be part of the operation?
- 21) What types of detergents and other cleaning agents will be used to maintain the luxury status of the hotel operation?
- 22) Since the proponent, Mox Chehalis, LLC is not in the hospitality business who will be the operators of this luxury complex?
- 23) How many people will the convention center hold? What type of events would be planned for this facility?
- 24) How many parking areas would have to be designated for the convention center?

Nor does this summary mention the potential impacts of the budget hotel noted in the discussion of Earth under **3.1.3 Topography** for which the same questions would be asked including the number of rooms.

Executive Summary Continued

“Approximately 40 condominium units” is an undefined number, it could mean that 30 units will be built or perhaps 50 units. Phase 2 expansion again is entirely too vague and gives the reader no guidance as to what could be expected in the future.

- 25) For example, does additional condominium units mean 10 more units or 200 more units?
- 26) Does potential development of retail space mean an opportunity for small locally owned operations?
- 27) Or does it mean that a “mall” type of operation would be considered?
- 28) Please describe the potential impacts to the existing shops and owners if this phase is carried out.

The Summary concludes that environmental regulatory issues will continue to be enforced and result in further “reductions in both fishing quotas and timber harvest(s)...”

The Pacific States Marine Fisheries Commission in Status and Future of Salmon of Western Oregon and Northern California: Overview of Findings and Options by Botkin, Cummins, Dunne, Regier, Simpson, Sobel, and Talbot, list the following components as some of the factors for causing the salmon decline: urbanization; agricultural practices; loss of streamside vegetation and functions; pesticide exposure; industrial pollutants exposure; estuary degradation and habitat area loss.

- 29) What effect would the Preferred Alternative have on each of these components?
- 30) What would be the economic impacts to the fishing and forestry industries?
- 31) What effect would the urbanization of the area have on the water quality to the estuary?
- 32) What benefit or detriment would that present to the established aquaculture of the area?

The No Action Alternative analysis is self-serving and does not address the intent of SEPA or its review process.

WAC 197-11-402 General requirements (10) EIS’s shall serve as the means of assessing the environmental impact of proposed agency action, rather than justifying decisions already made.

WAC 197-11-440 EIS contents (5) Alternatives including the proposed action (b) Reasonable alternatives shall include actions that could feasibly attain or approximate a proposal’s objectives, but at a lower environmental cost or decreased level of environmental degradation.

Further discussion and questions will be addressed in the individual sections.

Section 1.0

Project Description and Alternatives

1.1 Description of Project Purpose and Need

This section dismisses the feasibility of a 9-hole golf course as being unable to attract the players and produce the necessary revenue required. Research is indicated but nowhere is the supporting documentation available.

- 33) What are the names of the studies that helped the proponent to conclude that anything less than an 18-hole course is required?
- 34) What is the status of the other Grays Harbor golf courses?
- 35) How many days per year are they playable?
- 36) What is their utilization and accessibility for tee times on a daily, weekly, monthly basis?
- 37) What is the classification of the golf course at Ocean Shores?
- 38) How far is it located from the ocean beaches?
- 39) How far is it from accommodations, hotel, housing and/or condominiums?
- 40) How many 18-hole golf courses are located within a three hour radius of Seattle and Portland?
- 41) What nearby accommodations are available for other golf courses within this radius?

1.2 Project History and Alternatives

1.2.1 Preferred Alternative See comments listed above in Executive Summary.

Comment is made that this property has been zoned as Tourist Commercial. Please indicate the dates when this zoning change was made.

- 42) Please indicate the public review process dates and publications in which the process was announced.
- 43) Please indicate the date that the zoning was adopted and its regulation reference.

1.2.2 No Action Alternative

While it is correct to comment that the No Action Alternative would mean that the Links at Half Moon Bay project would not be built, it is totally inappropriate to speculate on what may be built in its stead. Because of the sensitivity of the area, any and all of the suggested “built” alternatives would have to undergo a similar EIS process. A No Action Alternative is an opportunity and should discuss the reasonable effects that could happen to the environment if left alone. The No Action Alternative does mention that other scenarios “could include parks/open space and recreation facilities as nature trails, biking trails and/or horseback trails. However, these uses are not within the mission and goals under which the property owner (Port of Grays Harbor) operates.”

Section 1.0

Project Description and Alternatives Continued

According to the Master's Program offered at George Mason University in Fairfax, Virginia as listed on February 18, 1999, recreation is a multi-billion dollar revenue producer. It generates over \$450 billion for the USDA service alone as the public seeks an increasing shrinking inventory of open space.

44) Please indicate how parks/open spaces, nature trails, biking trails and/or horseback trails would be inconsistent with the tourist commercial zoning classification?

45) Please indicate how the above uses would be inconsistent with the Port of Grays Harbor's mission and goals?

1.3 EIS Scoping Process

We appreciate that the City and the proponent recognized that a project of this magnitude required a Determination of Significance.

Section 2.1 Existing Conditions

2.1.1 Climate.

The moderate coastal temperature of the Westport area is probably accurately described for most years. The quoted average rainfall, however is understated. Grayland Station Number 453320 recorded the following precipitations from 1995 - July of 1999:

1995: 83.13 inches

1996: 88.44 inches

1997: 94.55 inches

1998: 89.00 inches

1999: 53.49 inches through July

The total four year average was 88.78 inches

(Source: Daily Precipitation Records NOAA)

The above figures represent a more realistic and usual rainfall average in the South Beach area. The Storm Water Pollution Prevention Plan (SWPPP) construction monitoring records at the Stafford Creek Correctional Center (Prison) will attest to the fact that rainfall in specific local areas can exceed averages for a region, causing in that instance over 100 SWPPP permit violations in one day and over 400 violations during a four month winter construction period. Often the standards of the Puget Sound are used for projects within Southwest Washington. These standards are based on a manual whose foundation is Seattle's 38 inches of average rain. Such reliance is a recipe for failure.

46) What plans have been considered for the timing of the construction of the buildings and the timing of the local rainy season?

47) What plans have been considered for the timing of the construction of the golf course and the timing of the local rainy season?

Climate change has not been adequately considered as a part of long range land use planning in this area of significant high energy coastal dynamics and climate.

Coastal activities including the viability of a destination resort could be greatly effected. All of this would have considerable effect on the southwestern Washington coast. Physical oceanographic changes, for example, upwelling rates and sea surface temperatures will impact the coastal zone and possibly alter the productivity of coastal systems and ecosystems.

48) What would be the effect of permanent inundation of coastal areas, beaches, wetlands and estuaries due to sea level rise?

49) What would be the potential to landward shoreline migration?

50) What would be the expected Increased erosion rates/events?

51) What would be the expected loss of habitat for migratory birds, fish, shellfish and waterfowl?

Section 2.0 Air Quality Continued

- 52) What would be the increased saltwater intrusion into freshwater aquifers?
- 53) What would be the potential for landslides and bluff failures due to increased wintertime precipitation, which also may increase the frequency and/or severity of ocean storm events or changes in storm direction?
- 54) What would be the effect of increased coastal flooding events due to sea level rise, altered hydrological/precipitation cycle (El Nino, La Nina, Global warming, etc.)?

Climate pattern and erosion changes can also directly effect human populations.

- 55) What would be the effect of increased water-borne health problems to the resort and the City?
- 56) What would be the effect of contamination of drinking water by saltwater intrusion and how would this residents and visitors?
- 57) What would be the effect of leaks from underground hazardous materials storage tanks, landfills or sludge composting units with rising water tables in coastal areas?

2.1.2 Air Quality Regulations and Monitoring

It is stated that the Olympic Air Pollution Control Authority (OAPCA) “has no outstanding issues related to air quality.” This statement could lead the reader to assume that there may have been some previous issues that are now resolved.

- 58) What air quality issues has OAPCA ever had with the City or its surrounds and what where their dates of occurrence?
- 59) What is the present measured attainment figures that OAPCA has for the City and when and where were they taken?

Asthma and allergies are common among the general population. Respiratory problems are often associated with the application of chemicals.

- 60) What best management practices have been developed for the application of fertilizers, pesticides and herbicides in an area where the prevailing wind is from the southwest blowing across the Pacific Ocean and into the Westport Peninsula?
- 61) What protection will be given to the health, welfare and safety of the patrons and nearby residents?
- 62) What effect will airborne fugitive particles have on the public resources of wetlands, habitat and wildlife?

Section 3.0

Earth

3.1.3 Topography

This section notes that elevations at the site range from sea level to approximately 20 feet, with 8 to 12 feet normal tides. In addition it is noted that the site is generally flat with an overall slope of approximately 0 to 3 percent. A site map which includes land contours should be included for proper analysis of topographical impacts.

- 63) What is the effect of storm surges to the tides in this area?
- 64) Quantify the amount of surge it would take to over top the primary dune parallel to the cement walkway and the proposed 4th , 7th and 15th holes and what effect would it have on the constructed wetlands?
- 65) If such a surge and overtopping were to occur, what would be the potential risk to the course, players?
- 66) What effect would salt water have on the tees, greens and fairways?
- 67) What would be the effect of the pollutants from sprays, fungicides, pesticides fertilizers and other chemical to the runoff as it returns to the waters of the ocean and/or the estuary and/or as it absorbs into the wetlands and aquifer?
- 68) During these wind events considerable sand transports from the southwesterly prevailing winds. How will the sand be removed from the areas of the tees, greens, fairways, connecting trails and wetlands?
- 69) How and where will these sands be disposed?

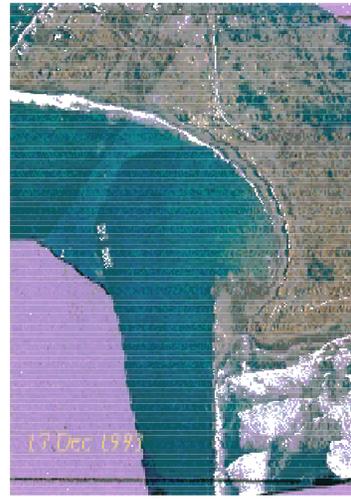
3.1.5 Erosion/Accretion

A breach at Half Moon Bay appears to be eminent again this year. A visit to the area of the 1993 blow out shows significant erosion as recent as November 18th of this year. Erosion in the Westport area has required over \$8 million in repairs. See the next page for Half Moon Bay erosion.

- 70) If there were a breach at that point, who would be responsible for a solution?
- 71) Who would pay for the solution?
- 72) If that became an area where condominiums were placed nearby, what potential danger would the erosion have to the safety of those residents?



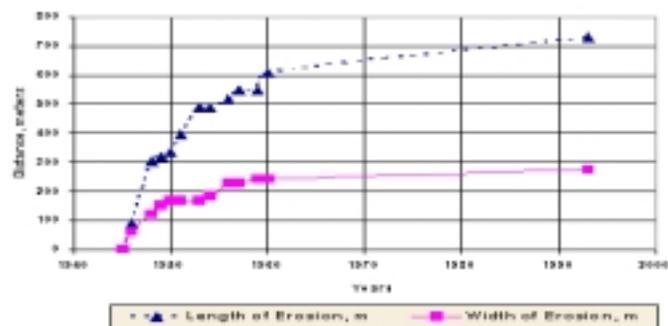
Half Moon Bay Breach, 1993



Half Moon Bay Breach, 1993



Half Moon Bay Erosion



Section 3.0 Earth Continued

3.1.6 Seismic Hazard

Brian Atwater is cited as pointing out that the Cascadia Subduction Zone produces large earthquakes. However the DEIS minimizes this by stating "...within the past 10,000 years..." A more accurate appraisal of Atwater's study follows, it is taken from the abstract of a speech he gave on Earthquakes and Tsunamis.

Geologic evidence found after 1985 shows that the Cascadia subduction zone has repeatedly produced earthquakes of magnitude 8 or larger (great earthquakes). The earthquakes happen infrequently, at intervals that average about 500 years. Along the coast of southern Washington State, for example, seven great earthquakes (or series of great earthquakes) have occurred at irregular intervals in the past 3500 years. Each of these seven events may represent either a rupture of most of the length of the subduction zone or a swift series of smaller ruptures. The most recent great Cascadia earthquake (or series) caused land to subside at bays and river mouths along at least 900 km of the subduction zone. Tree-ring dating shows that the subsidence occurred sometime between August 1699 and May 1700 at four estuaries in southern Washington. The earthquake responsible for this subsidence probably accounts for a tsunami that is known from written records to have struck Japan in January 1700.

(source: <http://www.vancouver.wsu.edu/programs/sci/speakers.htm>).

3.2.1 Geology

Global warming and sea rises are the subject of considerable discussion internationally.

A November 1999 conference in Bonn, Germany reported the effects of the rise of temperature and water to several of the islands in the South Pacific. In Tonga for example, the rise in sea levels has already contaminated the drinking water supply of the central and northern islands. That, along with frequent drought, has required the shipment of drinking water to the islands for two years. Strong winds and salt water spray have cut agricultural production and warming waters have affected fish supplies. The erosion of the beaches have created the most physical loss to the natural tourist amenities.

Similar stories from the Inuit's of Alaska indicate that ice caps are melting and will cause a rise in the ocean level.

73) What effect would a rise of the ocean level by 1" have to the Preferred Alternative? Describe its effects to tides and storm surge levels.

According to the DEIS the proposed project is not anticipated to have an impact on the stratigraphy or geologic structure of the site.

Section 3.0

Earth Continued

Stratigraphy is a description of the layering of geologic formations found beneath a point of interest. Over geologic time, many processes occur that result in the formation of this surface and subsurface. During some stages of history, deposition occurs, adding new layers to the already present earth materials. At other times, erosional processes remove materials from the earth's surface. The record of such encountered layers at a given point is commonly referred to as the stratigraphy for that point.

While the Preferred Alternative does not give specifics of footprint or setbacks it is well documented that foundations of buildings has the effect of fixing the forebeach, an action which in high energy areas often exacerbates erosion and causes scouring of the area in front.

74) What will be the effect to the beaches directly in front of the built environment of hotel, convention center, etc.?

75) Walkways ("boardwalks") are planned to encircle the area. To what extent will this become a bulkhead to the transport of sand throughout the changing seasonal deposition?

76) What plans have been considered by the proponent, City, Port, and County to protect marine resources and human life if the Preferred Alternative is chosen?

77) The No Action Alternative with some derision states that "Construction of structures with large footprints (e.g., condominium, office complex, amusement park) would significantly impact the structure and appearance of landforms such as sandy beaches and dune lands." What is the difference between a 200 - 400 room luxury hotel and an office complex and how would that not also significantly impact the structure and appearance of landforms such as sandy beaches and dune lands?

78) The discussion of the No Action Alternative again offers a cafeteria of intentionally presented undesirable development ideas. This is not productive to a serious environmental impact statement and demonstrates the proponent's lack of sincerity to adequately analyze the advisability and feasibility of the proposed project.

What is the difference between the condominiums referenced in the No Action Alternative and the condominiums of the Preferred Alternative?

3.2.2 Soils

79) According to the Preferred Alternative, the construction of the links and resort complex will alter the appearance of some on-site geologic landforms, including the sand dunes. How does this differ from the No Action Alternative discussion?

3.2.3 Topography

70) The Preferred Alternative references "multiple-story buildings will be created..."

The City of Westport has a building height limitation. What is the difference between the "Preferred" multiple-story buildings and the "No Action" several tall structures and what is the expected maximum height? See comment at **68**).

Section 3.0 Earth Continued

3.2.4 Unique Physical Features

The DEIS comments that the resort complex will affect open space recreational opportunities along the sandy beach at Half Moon Bay, “which is not a natural occurring feature....”

80) What is meant by this statement and what is its significance to the project?

3.2.5 Erosion/Accretion

This section makes a valid statement: “Past experience has indicated that development along the shore line can alter erosion and deposition processes.”

81) What risk assessment has been done to analyze the hazards to potential condominium owners and hotel visitors?

82) What are the impacts to public trust and public health and safety if shoreline modification activities are allowed on shorelines that are subject to:

1. Imminent erosion hazards (within 10 years)?
2. Intermediate hazards (within 30 years)?
3. Long-term hazards (within 60 years)?

83) What happens to the beach profile in front of such activities?

84) What is the consequence to clams and other burrowing creatures?

85) What is the consequence to sand beaches? What effect would this have on Tribal interests?

3.3 Mitigation Measures

This section doesn't mention the No Action Alternative.

3.4 Unavoidable Adverse Impacts

The description of unavoidable impacts appear to be the same for other described projects.

Section 4.0 Water

According to this section, the full buildout scenario for Section 4.0 is “assumed to be a conversion of 90 percent of all upland areas in the existing condition to impervious cover, with the remaining 10 percent upland area preserved for wetland buffers.” The No Action alternative is referred to the “baseline”. Table 4.1 Note 3, however states that the No Action Alternative defined for this study is the above 90 percent description.

86) Please explain which is correct? This Table and its footnotes is generally confusing.

Water is a significant factor to the success or failure of a golf course. Tees and greens are in particular subject to transpiration losses due to their manicured upkeep.

87) What would be impact to the viability of the golf course if adequate water cannot be provided?

88) If the tees, fairways and greens suffered a drought thereby reducing the playability/attraction of the golf course, what would be the expected loss to hotel, restaurant and other resort amenities?

89) What would be the expected revenues from this resort, if the course were not available?

90) The Site Plan found in the Executive Summary shows many areas of uplands to be converted to wetlands. What will be the effect of these created wetlands and their interaction with the ground water table?

91) What is the square footage of the created wetlands?

92) How would those created wetlands interact with existing wetlands?

93) What would be affected and how would this effect existing groundwater flow as it runs from south to north and eventually drains into Grays Harbor at the end of the spit?

94) What is the success factor of created wetlands?

95) What are the dynamics of groundwater in coastal dune systems?

96) What are the interactions of fresh water and saltwater when coastal aquifers are stressed by pumping?

97) What would be the risk of saltwater intrusion to the wellhead under the proposed golf course?

98) What is the influence of surface features on groundwater?

99) What is the effect of changing natural surface features on groundwater?

100) What does best science indicate as the proper sample minimums to identify a single threshold elevation for surface water/groundwater interaction throughout the project site? Describe the forgoing, using those sample parameters.

Section 5.0 Wetlands

Wetlands provide a unique asset to the Westport area. The interdunal wetlands under discussion here provide function that is important for the region.

“Runoff can alter four major wetland components: hydrology, water quality, soils, and biological resources (US EPA 1993; Johnson and Dean 1987) Because impacts to wetland components are not distinct from one another but interact (US EPA 1993), it is difficult to distinguish between the effect of each impact or to predict the ultimate condition of a wetland component by simply aggregating the effects of individual impacts (Hemond and Benoit 1988). Moreover, process within wetlands interact in complex ways. For example, wetland chemical, physical, and biological processes interact to influence the retention, transformation, and release of a large variety of substances in wetlands.” [Wetlands and Urbanization Implications for the Future, Puget Sound Wetlands and Stormwater Management Research Program (PSWSMRP), September 26, 1996, p. 3]

In general this particular wetland system serves to:

1. Conserve, protect and restore the environmental factors and functions that add to the quality of life for residents of the City of Westport, Grays Harbor County and the State of Washington.
2. Protect the public against avoidable losses from maintenance and replacement of public facilities, property damage, costs of publicly subsidizing mitigation of avoidable impacts, and costs for public emergency rescue and relief operations.
3. Wetlands and their buffers preserve and provide habitat, water quality and water quantity functions.
4. Help to buffer and/or avoid potential damage due to geological hazards or flooding and preserve natural flood controls and stormwater storage.
5. Provide and preserve groundwater recharge and prevent contamination of groundwater.
6. Help prevent cumulative adverse environmental impacts to water, wetlands, fish and wildlife habitats, frequently flooded areas, geologically hazardous areas and aquifer recharge areas.
7. Maintain and restore the chemical, physical and biological integrity of the waters of the United States, the State of Washington, Grays Harbor County and the City of Westport.

The wetland Boundary Map, Exhibit 5-1 is visually very confusing when compared to the narrative under Section 5.0. It appears that greater than 42% of the property is wetlands from the Map.

101) The map shows many delineated wetlands in close proximity to each other. What evidence do you have that these separate wetlands are not hydrologically or functionally connected?

102) What loss of function can be expected by the isolation of an existing wetland through the change of landscape to accommodate a fairway, green or tee?

Section 5.0 Wetlands Continued

103) What is the effect of loss of buffer to a wetland?

104) What is the cumulative effect of the loss of wetlands and loss of buffers to the regional significance of this interdunal wetland system?

Compaction of soils changes hydrologic periods. The DEIS states that the soils are primarily deep sand deposited by wind and wave action from the Pacific Ocean. In order to layout the golf course, tees, fairways, greens and connecting pathways will be constructed. This will mean that all areas of potential play, including the fairways will require that the surface will be compacted. Compaction will be necessary to support mowing apparatus, golf carts and walking from one hole to the next.

105) What is the effect of compaction on the delivery of water to wetlands?

106) What is the effect of compaction on surface water runoff absorption?

107) Commercial Sites A, B and possible maintenance area appear to be in delineated wetlands? Are these sites included in the wetland calculation?

5.3 Mitigation Measures

Compensatory wetland mitigation do not reflect the intent of the Growth Management Act: no net loss of wetlands. Mitigating for wetland impacts through enhancement or preservation of existing wetlands only will, by definition, result in wetland loss, thus violating the intent of GMA, as well as both Presidential and Gubernatorial executive orders for "no net loss of wetlands".

The discussion of signage, golf course rules and outdoor learning programs are inappropriate methods of mitigation for wetland or wetland buffer loss.

Removal and subsequent prevention of non-native, invasive species is listed as a possible mitigation.

108) What type of grasses will be used to create the tees and greens?

109) Are these native or non-invasive?

110) What control methods will be used to remove the aforementioned non-native, invasive species?

The No Action Alternative warns of significant unavoidable wetland impacts.

111) What leads the proponent to believe that any other development proposal would undergo a less rigorous SEPA requirement by the agencies and general public?

Section 6.0 Plants and Animals

The establishment of a golf course in the interdunal wetland system will significantly change the hydrology and water transport of the area.

Volume III - Hydrologic Analysis and Flow Control Design Page 19 Department of Ecology Stormwater Manual uses the following standard:

For all wetlands, all zones, the entire year, vegetation species richness decreases if

1. There is a post-development mean annual or mean monthly water level fluctuation (WLF) increase of greater than 5 cm (0.16 ft) and the predevelopment WLF is greater than 15 cm (0.49 ft), or
2. There is a post-development mean annual or mean monthly water level fluctuation (WLF) increase to greater than 20 cm (0.66 ft) and the predevelopment WLF is less than or equal to 15 cm (0.49 ft), or
3. The average annual number of stage excursions greater than 15 cm (0.49 ft) exceeds six, or
4. The duration of any one stage excursion exceeding 15 cm (0.49 ft) exceeds 72 hours, or
5. The total change (increase or decrease) in the wetland's dry period exceeds 2 weeks (336 hours) in any one year.

For all wetlands with amphibians for the period of 1 February through 31 May, breeding success declines if any one stage excursion exceeds 8 cm (0.26 ft) for 24 hours in any 30-day period. Water level fluctuation is defined as the peak water level minus the average water level. Stage excursion is defined as the change in water level from predeveloped to developed conditions.

112) What is the expected water level fluctuation once the Preferred Alternative is in place?

113) What plan would be in place to make sure that these minimum guidelines are being met and monitored throughout the construction and post-construction periods?

114) The section contains no discussion of amphibians that may reside, forage and/or reproduce in the area. What amphibians are found on the subject property?

115) What would be the effect of de-watering some of the wetlands to the amphibian population that is customarily found within the wetland?

The Grays Harbor Estuary received designation as a *Western Hemisphere Shorebird Reserve Network* site. It received the designation in the highest category of importance because it hosts more than 500,000 shorebirds or 30% of a flyway population annually. (The Sandpiper, Grays Harbor Audubon, Volume 5, Issue 1, February 1996.

The golf course will resculpt some of the sand dunes and landforms and create new wetlands from previous uplands.

116) What will be the effect of sand traps and other areas devoid of vegetation to the attraction of birds and other wildlife?

Section 6.0 Plants and Animals Continued

117) Reptiles are common inhabitants of the wetland system and are often attracted areas that hold heat. What would be the attraction of sand traps or other areas, including pathways to reptiles?

118) There is no discussion of the Townsend mole or other burrowing creatures. Soils with high organic content are prime habitat for earthworms, which are the prime foodstuffs for songbirds and the common mole. What control methods will be used for containing the mole population?

119) The effect to habitat appears to be a moving target. Under this section impacts are stated to be 29 acres. Under wetlands, page 5-3 it is 28.5 acres and on page 5-7 the figure is 32.75 acres. What figure accurately accounts for the amount of wetlands that will be fill, altered or excavated?

- Wetland areas are poor choices for development. Fill will cause increased flooding of adjacent land.
- Sufficient information has not been provided regarding the present function of the wetlands on the site.
- Since there is insufficient baseline information no assurances can be made that wetland functions will be replaced by any proposed mitigation plan.
- Loss of habitat and degradation of water quality affects the survival abilities of marine organisms, this may be in direct conflict with the *Treaty With The Quinault, Etc., 1855*, (Olympic Coast National Marine Sanctuary, FEIS/Management Plan, Volume 2: Appendices, pp. D-3,-5). This may interfere with and/or limit fish, shellfish, waterfowl and plants presently relied upon by the Quinault Peoples for subsistence and Ceremonial purposes. (ibid., pp. E-7, 8, 9).

The altering of land forms, lighting and increased human use over the approximately 250 acres of developed land will have significant impact to wildlife.

120) The Ocean Beaches and Half Moon Bay provide habitat and a resting and/or refueling stop for migratory birds on their way to and from breeding grounds. What would be the anticipated effect of the significant increase of human intrusion into those habitat areas?

Section 7.0 Noise

This section does not discuss or recognize any impacts from the proposed convention center or the human noise influence of resort patrons.

121) What would be the effect of 200 hotel guests to predicted noise levels?

122) What would be the effect of 400 hotel guests to predicted noise levels?

123) What would be the effect of 500, 1000, 1500 people attending a convention or activity at the proposed center?

124) What effect would this noise and activity level have to present residents and how would it effect present wildlife including migratory birds?

“Cumulative effects are the combined environmental influences that occur over time and space from a series of similar or related individual actions, contaminants or projects. Although each action may seem to have negligible effects, the combined effect can be severe (1991 Puget Sound Water Quality Plan, PSWQA). Related concepts of carrying capacity, sustainability and ecosystem health provide a general framework for measuring cumulative effects.

“Ecosystem health refers to the health of a community of living organisms interacting with one another and with their physical environment. The concept can be applied to communities of different scale or interconnected systems such as streams, wetlands and bays. Changes in ecosystem health can be measured and used as indicators of cumulative effects.” (*Aquatic Land, Strategic Plan*, Washington State Department of Natural Resources, 1992).

125) Cumulative effects of the project are not discussed for any of the sections.

What would be the cumulative, direct and indirect impacts? For example, the economic and population growth stimulated by the project may cause its own impacts to the environment. Thus, for each of the impacts discussed listed in WAC 197-11-444, evaluate the impacts of growth. See WAC 197-11-060(4).

126) For the specific section under discussion what would be the cumulative direct and indirect impacts of noise to the development area and the residential and commercial areas in and around the Docks?

Section 8.0

Aesthetics, Light and Glare

8.1.1 Aesthetics

This section properly comments that the ocean beach front is the most popular surfing spot on the west coast of the United States outside of California. It neglects however, to point out the importance of Half Moon Bay to winter surfing and the summer instructional surfing for those learning this recreational water sport.

127) Multiple-story buildings are described elsewhere as the probable design of the hotel complex and possibly the convention center. What effect will this have on existing views and ability of existing residents to maintain their property investment potential, especially if their view or access is impaired or taken by one of the parts of the Preferred Alternative?

8.2.2 Light and Glare

This section describes how the lighting of the hotel facilities, tennis courts, parking areas and pool areas will generally have lighting that is directed downward. It then goes on to describe that landscape areas and certain areas around the buildings themselves will have sodium-contact lighting which will be pointed upward.

128) What is the effect of light on night-flying migratory birds?

129) What is the effect of light on migratory birds and wildlife in an area that experiences frequent fogs, mists and rain events?

130) What is the mortality rate on birds because of lighting within an urban area?

Hazards to the public from golfing activities including driving ranges, often require protection devices such as netting or enclosed areas. One that was recently erected on the Whidbey Island Naval Air Station was 50-foot high.

131) What would be the expected height of a golf-ball safety net for the driving range and how would it effect wildlife, especially birds?

132) What would be the location of the driving range and how would it effect existing sightlines and views of the water, docks and sunsets?

133) What protection to the general public and wildlife would be provided for those holes located in the area now occupied by the public access walkway between Westhaven and Westport Light State Parks and/or other holes close to other public access?

134) Signs are often used to direct people to various destinations and electric billboards are frequently associated with convention centers and other activities. What signage is planned to promote the hotel, convention center, golf course, driving range, restaurant and other activities; where and at what height will they be placed and will they be animated?

Section 9.0 Historic and Cultural Resources

The earliest record of human life on the coast of Washington is that of the coastal Indians (WDOE, 1986). Five native American cultures occupied the coast areas...the Makah, Quileute, Hoh, Queets and Quinault” (Olympic Coast Marine Sanctuary, FEIS, p. II-89-90). The Quinault Nation and its members have been ancestral inhabitants and users of the Estuary prior to the first European explorations. “The entire area north of Willapa Bay can be considered a usual and customary fishing area for treaty tribes. Salmon and steelhead trout are the most important fishery resources available to the coastal tribes” (Olympic Coast Marine Sanctuary, FEIS p. II-95).

135) What will be the effect of the approximately 2,600 front footage primary dune modification on the ocean beach environment, including water runoff, forebeach scour and erosion potential from compacted soils created by tees, fairways, greens and connecting pathways?

136) What will be the effect of the condominiums to the dunal and the sandy beach areas of Half Moon Bay?

137) What is the risk to cultural resources and Treaty rights by the potential loss of the habitat that supports the populations of fish, shellfish and plant communities?

138) If there were a loss of razor clams, for example, because of the modifications of the beach environment (landform and chemical application), who would be liable for the loss of these subsistence, cultural and ceremonial uses of this Treaty right?

139) Exhibits 9-1 and 9-2 are difficult to read and identify key items and features.

140) 9.3 Mitigation Measures states that if construction encounters prehistoric or historic archaeological materials, construction will stop. Will there be experienced monitors at the site to determine the significance of any findings or will it be left to construction workers and superintendents on a time-schedule to finish the project?

Section 10.0 Transportation

The Preferred Alternative would have significant impact to traffic and traffic patterns. The phasing of the project does not take into account the cumulative effects of the development to traffic, parking and public accessibility. The layout of the proposed development effectively privatizes the beaches of the Pacific Ocean and the waters of Half Moon Bay.

Jetty Access Road is the main connector from State Route 105 to Westhaven State Park and the South Jetty. The South Jetty and the revetment which hugs the coastline of Half Moon Bay has since its inception experienced frequent problems. These problems have required access to the Jetty by construction trucks and equipment. The present asphalt width of the Jetty Access road is 22 feet. The shoulders are sand areas with some dunal grasses that have been compacted over the years by the thousands of visitors to the Surfing areas of Westhaven State Park and Half Moon Bay.

141) What modifications are proposed to this road to accommodate the access to the golf course and hotel, convention center, etc?

142) It appears from the Site Plan Map that the access for the golf course clubhouse and parking, the pool and luxury hotel all feed off of Jetty Access Road. What would be the impact to the financial stability and operation of the project if a major construction project to the Jetty was required?

143) The golf course and condominiums are shown on this map to closely border the Jetty Access Road. What would be the impact to public parking on the shoulders of the road once these projects were in place?

144) What effect would this have on surfers and other beach users to park and access the public waters of the Pacific Ocean and Half Moon Bay?

145) Will the Jetty Access Road be widened?

146) Who will bear the initial expense and future maintenance?

147) The discussion under **10.2.2 Traffic Volumes** conveniently ignores the proposed Convention Center and the traffic that an event would bring to the area. What traffic impact would 500, 1000 1500 additional visitors have to the area?

148) Most of the traffic is considered to be directed through Jetty Access Road, however, some other traffic will undoubtedly find access through Montessano Street and new access roads to be developed. Who will pay for these roads and their maintenance?

149) What will be the effect of additional traffic to city parking spaces and in particular to those parking spaces now utilized by the fishing fleet and existing shop owners for their customers?

Section 10.0

Transportation Continued

150) Westport Beaches often are fortunate to enjoy the harvesting of razor clams. A clam tide in the Twin Harbors area is known to back up traffic on State Route 105 eastward past Elk River and beyond. If a convention, golf tournament, or other significant activity were to happen at the same time, what would be the impact to traffic in the immediate area?

151) If some or all of the above were to happen, what would be the impact and ability of emergency vehicles and personnel to access various parts of the area, such as the beach at Westhaven, the Convention Center or the hotel?

152) Presuming that the built course is of championship caliber and assuming that a world-class tournament was staged, what would be the expected attendance to this sort of event?

153) How would this impact traffic, air, noise, water quantity and quality?

154) What would be the impact to wetlands and their buffers if a championship tournament were staged?

155) How many spectators could be expected to attend the tournament?

Section 11.0 Public Services and Utilities

Public Services and Utilities will be greatly impacted by the proposed Preferred Alternative. The impact of the convention center is not considered.

11.1 Existing Conditions

In general, the fire, police and justice system is understated.

The capacity for the Grays Harbor County facility located in Montesano is correctly identified as having a capacity of 120 beds. What is not pointed out is that the facility was originally built for 82 prisoners, but 38 bunks were added with no new construction. Jail population was at 130 as of December 4, 2000. Throughout 1999 the facility was also at 109% of capacity.

“The Grays Harbor County Jail is in a constant state of overcrowding. Voters rejected a proposal in 1997 for expansion and remodeling of the Sheriff’s Department Jail and the Juvenile Detention Center. The overcrowding status requires a policy of only accepting inmates arrested on certain charges. Individuals with misdemeanor warrants are at times not accepted due to the overcrowding situation.”

source: <http://www.co.grays-harbor.wa.us/info/sheriff/corrections.html>

156) What would be the cost and effect of Westport being required to establish a city jail in order to accommodate increased incidences of crime including misdemeanors?

157) Where would this facility be located and who would pay for it?

158) According to the DEIS crime incidences requiring arrests are at 13% of population total, what would be the impact to law enforcement, fire of an additional 500, 1000, 1500 people in the area?

159) A convention center will place many people in a specific area at the same time. Depending on the subject of the convention (e.g., political or sports) activities can become confrontational and/or over-exuberant. What would be the impact to law enforcement under these circumstances? Who would pay for this added security?

The DEIS mentions that the City covers 1910 square miles and has a population of 2,075. While the population figures are probably correct the area description is considerably off. The US Bureau of Census reveals that Westport is located at 46°54'N 124°7'W. Its land area is 3.57 square miles (2,284 acres) with a water area that is 0.62 square miles (398 acres). The 1910^{+/-} square mile figure (1,222,400^{+/-} acres) more correctly refers to the area of Grays Harbor as a whole.

11.2.5 Water Supply

Table 11-2 summarizes water supply/demand. Columns MGY and AF express the same measurement in different units, however a conversion reveals that they are inconsistent and not equal.

160) Is it the intent that these columns are different units and if so, which column expresses the correct value?

Section 11.0

Public Services and Utilities Continued

161) Table 11-3 summarizes the average water use for Phase I. According to this table and those expressed in Table 11-2, the available water supply is 128 MG.

Below is a note from the February 8, 2000 Westport City Council Minutes:

“Phillips explained his report on Westport’s water system production inventory figures. The bottom line, based on the average annual use, is Westport has a reserve of 14.5 million cu. ft. of water per year for future development. This is based upon the wells that are currently on line and being used for production of water.”

162) According to the report given to the Mayor and City Council, 14.5 million cubic feet is the present day maximum available supply. This converts to slightly over 108 MG, approximately 20 MG less than that stated in Tables 11-2, 11-3, and 11-4. What would be the effect of the use of 93% of Westport’s water for Phase I? What would be the effect of water use at Phase II?

163) The marine process industries rely on water to produce their water-dependent products. What would be the effect on these industries if the golf course and related developments exceeded the availability demands?

October 10, 2000 City of Westport Council Minutes:

Kitchell reported on a presentation he and Lilja attended on a water reuse treatment system. The proposed developers of the Golf Course/Resort have asked the City about providing a reuse treatment system for their water use. Kitchell stated because the water would be in contact with the public, it has to be treated as a ‘Class A’ which involves much more thorough treatment than what the City is currently doing (Class B or C).

According the Ecology “Orange Book” which is used as the standard for the state with respect to wastewater and wastewater treatment plants:

“Class A reclaimed water will at all times be oxidized, coagulated, filtered, and disinfected wastewater. State water reclamation and reuse standards call for Class A reclamation water to be filtered to a turbidity level which does not exceed an average operating turbidity of 2 nephelometric units (NTU), determined monthly, and which does not exceed 5 NTU at any time. Filtration can be achieved by passing oxidized wastewater through natural undisturbed soils or through filter media such as sand or anthracite.

Class A reclaimed water must be disinfected such that the median number of total coliform organisms in the wastewater after disinfection does not exceed 2.2 per 100 milliliters, as determined from the bacteriological results of the last seven days for which analyses have been completed, and such that the number of total coliform organisms does not exceed 23 per 100 milliliters in any sample.

Class A reclaimed water is currently the only reclaimed water class for which Ecology requires coagulation and filtration. Further, the disinfection requirements for Class A reclaimed water are more stringent than for Class C or D reclaimed water (the disinfection requirements for Class B reclaimed water are identical to those for Class A). Class A reclaimed water must be used where the potential for public exposure to reclaimed water is high.”

164) What would be the expected cost to the City to install such a system?

165) What portion of this cost would be borne by the taxpayer?

166) What would be the effect of its high chlorine content, possible low dissolved oxygen and pH on wetlands and grasses?

Section 12.0

Pesticide, Herbicide, Fertilizer Use and Effects

12.2.1 Preferred Alternative

Maintenance of the hotel, complex, condominiums and associated commercial development is not expected to have significant impacts.

167) What shrubs, trees, plants and other landscape covers will be used?

168) The Site Plan map indicates “heavy landscape screening”, what impact will this have on vegetative maintenance?

169) Lawns are popular land coverings around areas where people live. How much area, not including the golf course will be planted in grasses?

We appreciate that the DEIS recognizes that the mowing, irrigation, cultivation and use of pesticides, herbicides and fertilizers will impacts to water quality, wetlands, soils, wildlife habitat and human health. The solutions offered by the DEIS are Best Management Practices (BMP), Integrated Pest Management (IPM) and a Natural Resource Management Plan (NRMP). These practices are common in golf courses throughout the Seattle and Portland Metropolitan areas. However, they have significant failures to the protection of human health, safety and welfare and wildlife protection, including ESA threatened or endangered species.

Working as a Golf Course Superintendent has been found to significantly increase the risk of dying of four cancer types including - brain cancer, lymphoma (non-Hodgkin’s lymphoma, NHL), prostate and large intestine cancer. A study was conducted of 686 deceased members of the Golf Course Superintendents Association of America from all U.S. states who died between 1970 and 1992. Brain cancer rates for the Superintendents was found to occur at over twice the national average, while non-Hodgkin’s lymphoma also occurred at over twice the national average. Prostate cancer occurred at nearly 3 times the national average and large intestinal cancer occurred at 1.75 times the national average. The researchers stated that a similar pattern of elevated NHL, brain and prostate cancer mortality along with excess deaths from diseases of the nervous system has been noted previously among other occupational groups exposed to pesticides. (SOURCE: American Journal of Industrial Medicine, 29(5):501-506, 1996)

170) How would golf course personnel be protected from these risks?

171) How would the public who lived in the immediate area be protected?

Dr. Nathaniel Scholz of the National Oceanic and Atmospheric Administration/National Marine Fisheries Service (NOAA/NMFS) presented a paper at the recent “Agriculture and Water Quality in the Pacific Northwest” conference in Eugene, Oregon October 24 and 25, 2000. NMFS, through its Northwest Fisheries Science Center in Seattle, has been investigating the sublethal effects of common pesticides, especially diazinon, on various salmonid species. Much of this research has centered upon the salmon olfactory nervous system-that is, the salmon "nose." This organ is extremely sensitive.

Section 12.0

Pesticide, Herbicide, Fertilizer Use and Effects Continued

Many important salmon behaviors appear to be triggered by olfactory cues, including predator recognition, reproductive activities, and homing ability. Pesticides routinely detected in Northwest waters have been shown, at certain concentrations, to affect salmonid olfactory sensitivity, therefore the implication is that behaviors directly related to species survival can be adversely impacted by pesticide residues.

We are told that Appendix A discusses and provides an overview of the NRMP as provided by Audubon International, however the specifics of the plan eluded to in that section's Appendix I, II, III, IV, V, VI, VII and VIII are placeholders and provide no information other than heading titles. This does not allow analysis of a critical part of the proposal, without this information we cannot concur that "impacts are not expected to be significant."

172) What would be the effect of stormwater runoff from the resort, convention center, condominiums and associated parking lots of Phase I on the Bull Trout and other aquatic species that visit and/or use the habitat of Half Moon Bay?

173) What would be the effect of groundwater from the resort and condominiums of Phase I to the same location?

174) If the holes are built at the location of the Park cement walkway, what would be the likelihood of pesticides, fertilizers or herbicides migrating through groundwater runoff or other methods to the ocean beaches paralleling these holes?

175) What level of toxicity from applications recommended by the NRMP would be necessary to cause mortality in shellfish, such as razor clam?

Appendix A which discusses the NRMP, appears to be a "boiler-plate" description of a management plan developed for most golf courses. Reading the section appears to have little relevancy other than changing the name of the project.

176) What site-specific analysis has been done by Audubon International?

177) Please explain the inconsistency of fairway and rough descriptions of Scottish Links style in Section 1.0 with the management practices described in Appendix A. For example, how are the suggested activities listed in Appendix A, Tables 3-2 through 3-6 and the Basic Annual Maintenance Guide on page 39 - 40 different in management intensity for the Links at Half Moon Bay from a more upland golf course?

178) What will be the average pounds of pesticides, fertilizers, herbicides expected to be applied to the Preferred Alternative?

Section 12.0

Pesticide, Herbicide, Fertilizer Use and Effects Continued

There is no list of animals or birds as an Appendix item as there is for Plants. A listing of this nature is helpful to analysis the potential effects of the Preferred Alternate. Without this list and without the list of actual pesticides, herbicides and fertilizers impacts are difficult to analyze. The USA for example, recognized the serious avian mortality rate as a result of the use of the organochlorine insecticide DDT. While its use has been banned since 1972, the global use has not.

Many of the birds that visit the ocean beaches of Westhaven Park and Half Moon Bay come from all over the world.

Broad spectrum pesticides can also kill or injure birds by interfering with their food source. Water fowl that feed on aquatic insects and other insectivorous birds, including nestlings can be fatally affected by chemical applications. Crane fly larvae are often a favorite meal for the frequent wetland visitor, the Red-Shafted Northern Flicker.

179) What list of birds has been made for the subject property?

180) What list of animals has been made?

181) What is the population of bats on the subject property?

182) What would be the effect of reduced insect availability to birds, animals, reptiles and amphibians?

This section is totally deficient and requires further detail in order to properly comment.



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