From: Gray, Melinda [mailto:Melinda.Gray@amec.com]

Sent: Friday, May 27, 2011 5:55 PM

To: Williams, Brian W (DFW); Dunkin, Kristie A

Cc: Dewell, Jane (ORA); Ellis, Steve

Subject: RE: WDFW Comments - Marine biota Baseline Monitoring, May 20, 2011

Thanks Brian--

See responses below.

Section 2.1.1.2.2 - Macroalgae

Section 2.1.1.2.2, paragraph 2, third sentence:

Sampling stations for the macro algae bed should begin at the inner margin of the bed. It is only appropriate for sampling to begin at MLLW if it corresponds to the inner margin of the macro algae bed.

Suggestion accepted, change will be incorporated

Section 2.1.1.2.2, paragraph 3:

This paragraph states that the statistical design will only be based on the kelp species. The sampling plan and statistical design needs to address both the kelp species and red/green algae species. You will need to revise your sampling strategy to statistically address both. You could combine the kelp and red/green species by using % cover or keep them separate them by using different metrics of presence (holdfast and %cover) and conduct a statistical analysis for each.

Steve and I will discuss this and get back to you.

Section 2.1.1.2.2, paragraph 4:

The spatial separation between the 7 trestle location transects should be identified.

This section will be updated as follows:

As required by the Settlement Agreement, five transects will be established at 15-foot (4.6 m) intervals along the beach, with the middle transect at the centerline of the proposed pier. In addition, to monitor for prop-wash impacts associated with construction, two transects will be established. One transect will be 50 feet (15.2 m) northwest of the edge of the footprint of the trestle and one will be 50 feet (15.2 m) southeast from the edge of the footprint of the trestle, or as adjusted by observations made during construction.

At the control site, transects will be placed similarly to the project site. Transects will be established at 15-foot intervals along the beach, with the transect closest to the outside transect of the proposed pier survey site at least 75 feet (22.9 m) away from the project site.

Section 2.3 Geoduck Study Design

How was a minus 18 determined as the inner limit for the geoduck survey transects?

The WDFW stock assessment protocol (Bradbury 2000), page 7 says that density of harvestable geoducks should be surveyed "along a series of standard strip transects, each comprising an area of 6 ft. wide by 150 ft long,... running directly offshore from the -18 ft MLLW countour to the -70 ft. contour."

Section 2.4.1.1 – Benthic Invertebrates

Benthic sampling should identity all of the bivalve species present at the project site.

Change accepted and incorporated

Section 2.4.1.2 Epibenthic Invertebrates

Your proposed survey methods will only be able to identify <u>macro</u> epibenthic invertebrates. Your sampling plan should state as much.

Change accepted and incorporated

Section 2.5 Forage Fish

As a reference for you project site samples, it would be helpful for your sampling design to included a reference sample from a beach site adjacent to the project area where surf smelt or sand lance spawn has been historically documented.

Change accepted and will be incorporated—a suggested reference site would be appreciated.

General:

Your surveys should identity all marine invasive species present at the project site. Change accepted and will be incorporated.

Thanks for your prompt attention to this!

Melinda