



Ebey Island Restoration Feasibility Study
Advisory Committee Meeting #1 and Site Tour
April 27, 2010

Submitted to:

Washington Department of Fish and Wildlife
16018 Mill Creek Boulevard
Mill Creek, WA 98012-1541

Submitted by:

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AMEC Project No. 0-915-16971-0

The following notes were recorded at the April 27, 2010 meeting of the Stakeholder Advisory Committee for the Ebey Island Restoration Feasibility Study. A list of meeting attendees and their affiliations is included. The committee met from 3-6 PM, beginning with a 1.5-hour long meeting at the Snohomish County Administration West Building in Everett, and concluding with a 1.5 hour tour of the project area. Questions regarding these notes should be directed to Cleve Steward, Consultant Project Manager, Tel. 206-719-1260; cleve.steward@amec.com.

Meeting Notes:

- I. Introductions by WDFW Project Manager Richard Tveten
 - A. Introduced self briefly
 - B. Introduction of Doug Hennick
 1. Watershed Steward
 2. Fish biologist
 3. Working in Snohomish watershed 12 years
 4. Key to acquisition of Ebey Island property for restoration
 - C. Introduction of John Garrett
 1. Wildlife Area Manager
 2. Work goes beyond fish: includes recreation, waterfowl
 - D. DFW mission
 1. Protect, enhance, and restore fish, wildlife, and their habitat
 2. Provide sustainable, fish- and wildlife-related recreational and commercial opportunities.
 - E. Ebey Island
 1. A key "choke point" for salmon in Snohomish watershed
 2. Overview of selection process by which AMEC was chosen
- II. Self-introductions of meeting attendees
 - A. Dan Evans, Dan Evans Consulting, public outreach lead on AMEC team
 - B. John Engel, Snohomish County Public Works, Surface Water Management
 - C. Janne Kaje, King County
 1. Co-Chair of Salmon Technical Committee for Snoqualmie-Skykomish Watershed
 2. Representing King County's interest in the basin
 - D. Jason Anderson, Stilly-Snohomish Fisheries Task Force
 - E. Kye Iris, WDFW, property acquisitions and grant proposals for acquisitions
 - F. Sharon Swan, Snohomish County Parks and Recreation
 - G. John Garrett, WDFW, Wildlife Area Manager
 - H. Russell Link, WDFW, Program Manager
 - I. Doug Hennick, WDFW, Fish and Wildlife Biologist
 - J. Mike Blackbird, Pilchuck Audubon
 - K. Nick Harper, Cascade Land Conservancy, runs Snohomish County office
 - L. Kate Halstead, Sno-Valley Tilth
 - M. Walker Stanovsky, AMEC
 - N. Ruth Millner, WDFW, district wildlife biologist
 - O. Cliff Strong, AMEC, project administrator / land use planner
 - P. Cory Armstrong, YMCA of Snohomish County
 - Q. Cleve Steward, AMEC, project manager, fisheries biologist
 - R. Micah Wait, Wild Fish Conservancy
 - S. Dr. Tom Nowak, owns parcels adjacent to SE corner & center of WDFW land
 - T. Brian Bookey, Snohomish County Ag Advisory Board
 1. Dan E notes Ryan Hembree would have attended as well, if he could.
 - U. Matt Brennan, PWA, hydraulic engineer on AMEC team

- V. Bob Battalio, principal at PWA, civil engineer on AMEC team
 - W. Ryan Bartelheimer, AMEC, engineer
 - 1. Formerly employed by Snohomish County Conservation District
 - 2. Former Flood Control District Commissioner
 - X. Phil Cunningham, Ebey Island landowner, DD 1 Commissioner
 - Y. Everett Alexander, adjacent landowner, (past DD 1 Commissioner?)
 - Z. Casey Rice, NOAA fisheries in Mukilteo, monitors restoration in Snohomish basin
 - AA. Monty Marty (sp?), Snohomish Conservation District
 - BB. Andrew Corbina, WSU faculty
 - 1. Works w/ Snohomish County agriculture
 - 2. Also works w/ surface water management on Smith Island
 - CC. Richard Tveten, (previously introduced)
 - DD. One latecomer, a man who sat near the door and whose name we didn't catch
- III. Dan Evans: Purpose of the Advisory Committee
- A. Identify key information and values for the process
 - B. Aside: Addressing tension between agriculture and restoration communities
 - 1. The "elephant in the room"
 - 2. Several people in the room are working for common ground on countywide level
 - C. The current project
 - 1. Feasibility study—not decisional
 - 2. Goal is to narrow to a preferred alternative with broad support
 - 3. This is a "rowboat" in the larger tide of the ag/restoration conflict
 - 4. We will try to design a project that is capable of moving forward
 - D. Advisory Committee
 - 1. A place to test ideas
 - 2. Not a decision-making body
 - E. We're looking for a way forward with broad support
 - F. This may not mean strict consensus
- IV. Cleve: Feasibility Study Process
- A. Working w/ finite time (12-13 months) and money
 - B. The goal: Arrive at a preferred alternative
 - 1. Enough to describe to funding sources and constituents
 - 2. A vision we can all support
 - C. To achieve commonality of vision,
 - 1. Project team will be interactive with Advisory Committee
 - 2. We've set up milestones w/ checkpoints along the way.
 - D. The process:
 - 1. 6 technical phases (ran through as described on handout, p.1)
 - 2. If an attendee is not on Advisory Committee, but would like to receive project information sent to the Committee, provide your contact info and we will add you to the distribution list
 - E. Project schedule and milestones
 - 1. Described as on p. 2 of meeting handout
 - 2. Goal is preferred alternative
 - 3. Secondary goal relates to evaluation of 3 selected alternatives
 - a. All 3 should be detailed enough for further grant funding in case we need further information or we have not reached agreement
 - 4. Want product in time to turn around for 2011 grants
 - 5. "You're all experts in your own way, and we want to take advantage of that"

- 6. Door prize: 1 dozen fresh eggs from Cleve's chickens
- F. Advisory Committee meeting dates, as listed on handout p. 2
- G. Deliverables, as on handout p. 3. "Grand Finale" is Feasibility Report
- H. Group contact information, as on handout pp. 4-5
- V. Project Concepts
 - A. Dan: At this stage, we want to compile not judge
 - B. Ryan: Introduction of maps
 - 1. Small map handout
 - a. Whole island
 - b. White: County map shows public rights-of-way
 - 2. Big wall map
 - a. Corresponds to red rectangle on handout map
 - b. Is area of primary focus on this project
 - c. Includes Snohomish County dike data
 - d. But amended with input from recent Diking District meeting
 - C. Ryan: drawings of breaching alternatives
 - 1. Existing conditions
 - a. Dike, tide gates, pump station
 - b. Interior of island compared to range of tidal influence outside
 - 2. Concept #1
 - a. Full setback dike
 - b. May not be feasible because of soft soils in island interior
 - c. Would restore full tidal influence to restored land
 - d. Could essentially cut island into two separate diked areas
 - 3. Feasibility study as a concept
 - a. Should try to find "bookends" of what is possible
 - b. Ensures that later evaluation includes diverse alternatives
 - 4. Concept #2
 - a. Leave outboard dikes as they are
 - b. Leave overall drainage of diking district intact
 - c. Construct new partial-height setback dike
 - d. Restore muted tidal influence between setback dike and existing dike
 - e. Use self-regulating tide gate
 - D. Dan: Asks Ryan to characterize present usage of land on the island
 - 1. Ryan: Ag is predominantly grazing
 - a. Mainly beef, some others
 - b. Not a lot of crops
 - 2. Everett Alexander:
 - a. Lots of haying, too
 - b. Anything needed can be done
 - c. Right now, cows are most viable
 - 3. Ryan: In the past, various crops and corn have been grown
 - a. The difference is how much the pumps are run
 - b. Island could be kept dryer for higher-value crops
 - E. Richard: What about the forest in the SE of the WDFW property?
 - 1. Ryan: It's basically intact spruce forest
 - a. Pretty wet
 - b. Probably pretty intensive use by wildlife
 - c. Not been cleared in recent past, partly because of soft organic soils

- d. Buried gas line
- F. John Engel: Could DD commissioners describe infrastructure in specific?
 - 1. Would be helpful
 - 2. Maybe not at this meeting
- G. Dan: That's a good segue to Q&A / group discussion
- VI. Conversation / Q&A segment (started 3:58)
 - A. Dan: Let's hear from the "fish folks"
 - 1. Janne Kaje:
 - a. Different watersheds have different constraints on salmon life history
 - b. In this watershed, juvenile habitat is missing
 - c. Three key types of juvenile habitat
 - i. Estuary habitat (includes Ebey Island)
 - ii. Main-stem river habitat
 - iii. Marine nearshore
 - d. In the Puget Sound, few intact estuaries remain
 - e. He knows Ebey Island some, but not intimately
 - f. Anxious to learn more from residents
 - g. In Snohomish basin, estuary habitat is very limiting on salmon
 - h. All anadromous fish move through estuaries twice in their life-cycles
 - 2. Casey Rice:
 - a. There's quantitative evidence of estuary's importance in Skagit basin
 - b. Snohomish data is developing, but not there yet
 - c. Fish use of habitat is a function of its "plumbing"
 - i. Distance and number of bifurcations are limiting
 - ii. Need to design with this in mind
 - iii. Then document whether the restored habitat is actually working
 - d. They're now doing fish counts in the vicinity of Ebey Island
 - e. Dan: How good is this habitat?
 - i. Casey: Intuitively it's good
 - ii. We don't have the data to back that up yet
 - f. Sharon Swan: How important is salinity?
 - i. Casey: Not so important
 - ii. But tidal range is very important
 - 3. Doug Hennick:
 - a. Length of channel formation is exponential with restoration size
 - b. Therefore one big restoration is better than several small ones
 - c. Deadwater Slough is just off the mainstem, therefore easier for fish to find than are other distributary channels
 - d. Chinook seem perhaps to prefer least salty parts of estuary
 - e. Ebey fits that bill
 - 4. Everett Alexander:
 - a. Recently the river has been alive with 4" fish jumping. Why?
 - i. Cleve: They all come down in a slug when released from the hatchery; the hatchery release record should tip us off. Mass release gives fish a chance to overcome mergansers and other predators by sheer numbers; food may become limiting though.
 - b. Why not just shoot the mergansers?
 - c. Why instead ask all these sacrifices from agriculture?
 - B. Dan: Let's hear from some of the other agriculture people

1. Brian Bookey:
 - a. He's a neophyte on habitat restoration
 - b. Thought he heard opposite about juvenile chinook salinity preference at Blue Heron Slough recently
 - c. Troubled by lack of integration of/overall strategy for restoration projects
 - i. DFW, Port of Everett, City of Everett all have their own
 - ii. They're not coordinated
 - d. Is this project appealing just because WDFW already owns the land?
 - e. His understanding of regional responsibility
 - i. Snohomish County is responsible for basin-wide salmon recovery
 - ii. Why isn't there more coordination?
 - f. Need to look at current AND future land use
 - g. Sustainability
 - i. Once habitat is underwater, it's gone
 - ii. Chance to farm it with future techniques is lost forever
 - h. Land use policy
 - i. Believes land use designation is Ag 10
 - ii. Says we are talking about converting that
 - iii. Where does this fit into County land use plan?
 - iv. He's told habitat is not a "use," it just "happens"
 - v. So there's no larger process / structure to restorations
 - i. Leque Island
 - i. Growth Management Act (GMA) makes considerations for ag
 - ii. Felt WDFW didn't account for these on that project
 - iii. All emphasis was on Endangered Species Act
 - j. Happy to participate in this group, but concerned about:
 - i. Isolation from other restoration projects
 - ii. And from any larger strategy
2. Kate Halstead
 - a. Floating gardens of ancient Mexico City
 - i. Used dredge & pile to turn wetlands to farm
 - ii. Intensive ag supported large, dense population
 - b. "I'm convinced that we could create and develop a template version" on Ebey
 - i. Create 5- to 15-acre islands
 - ii. Farm intensively and organically
 - iii. High visibility on US-2
 - iv. Weekend barges could bring tourist visits
3. Andrew Corbina
 - a. Demand for local, organic food is too large to meet
 - b. Good opportunity to teach best management practices for ag
 - c. Teach the many people from cities who want to become farmers
 - d. His value for this project would be to save the *best* land for farming
4. John Garrett
 - a. A major component of wildlife strategy is ag for wildlife benefits
 - b. Another is trying for moist-soil management
 - i. Water-management cell
 - ii. We can manipulate water levels within each cell
 - iii. Facilitates desirable invertebrate populations
 - c. Recent study by Mark Petrie (needs to be verified)

- i. Working in Skagit w/ Ducks Unlimited
 - ii. Goal: Identify ideal balance of ag/moist soil/estuary
 - iii. Bottom line result: We still need a high level of ag
 - iv. Supports over-wintering birds, etc.
 - 5. Phil Cunningham
 - a. Went to meeting (site visit?) about Smith Island restoration
 - b. Asked "What do you think the success rate will be?"
 - c. He was answered, "We don't know."
 - d. That's a tough way to do business.
 - C. Mike Blackbird: Bird perspective
 - 1. Need to consider populations of birds before & after restorationWhen evaluating alternatives
 - D. Sharon Swan: Recreation values
 - 1. Opportunities for urban populations
 - a. Population in county is booming
 - b. This estuary is located right between Everett and Marysville
 - c. For this site, recreation is complementary to both ag and restoration
 - d. Getting people out to places builds love for them
 - 2. As Brian said, we need to look at the whole estuary
 - 3. Hunting needs to be considered; she's surprised there's no representative at meeting RT.
 - 4. Regarding public property north of US-2 on the map
 - a. She doesn't know what the plans are (county owned?)
 - b. But will look into it.
- VII. Cliff: Logistics about site visit

We have not reproduced the flip chart notes or the large drawings that were used to describe existing water control structures and illustrate general restoration concepts.

Notes from the tour of the project area (3 stops)

- I. Stop 1 – Hunting Club (end of 38th St. SE near Everett Alexander's barn)
 - A. Arrive 5:03 PM
 - B. Discussion topics:
 - 1. Looking east, northeast - generally wet pastureland w forested area off to the east; leased for cattle grazing
 - 2. Past uses
 - a. John Garrett: High ground, incl. Everett's barn, formerly an airstrip
 - 3. State of spruce forest at SE corner
 - 4. Ducks Unlimited
 - a. Past & future work – some lack of clarity of what already done, what planned
 - b. Related to the shallow ponds just there.
- II. Stop 2 – WDFW Property (where Homeacres Road turns south, at NW corner of site)
 - A. Arrive 5:15 PM
 - B. Cleve explains why we're standing there
 - C. Does WDFW have a vision for this corner of the land?
 - 1. John Garret: Not really; acquisition is too new
 - 2. But they did think of setting aside for watchful wildlife (not hunting)
 - D. Cleve: Question about state of the dike

1. John Engel: Near-breach in January this year
 2. John Garrett: Diking district mentioned that it could use repair
 - a. At south end of WDFW SE property
 - b. Ryan: Also at very S tip of island
 - E. John Garrett & Cliff point out location of pump station
 1. Elsewhere, mainly scrub wetlands
 2. Plus WSDOT mitigation site to SE
 - F. Problem with dike along WDFW boundary (re. restoration)
 1. Private parcel in middle
 2. Homeacres Road / 43rd street also runs through middle
 3. Ryan: Raising road is possible, but expensive
 - a. There's not really an inexpensive alternative
 4. John Garrett: Would probably just do a setback dike along road
 - a. On WDFW property
 - b. And just not mess with the road issue
 - G. Cliff: Logistics: No time for both stops 3 + 4
 1. Which to keep?
 2. Cleve: Stick w/ WDFW property and go to stop 3
- III. Stop 3 – Dike Walk
- A. Arrive 5:30 PM
 - B. Ryan: Description of how the dike system works
 1. Now is high tide
 2. Can get higher in a flood
 3. Gas pipeline
 - a. Can see where it crosses dike to SE
 - b. Comes onto island from Ebey Slough
 4. Get a sense for how high water would be in island if tidal
 5. Conditions on interior of island
 - a. Away from flowing water, softer, organic soils occur
 - b. For example, road beds on island settle unevenly
 - c. Geotech report from pipeline installation

For each 1 foot of fill added They observed 6 to 9 inches of subsidence
 - C. Question: How much have soils subsided?
 1. Ryan: Don't really know.
 - a. The very south tip of island has never been diked
 - b. It is about 2 feet higher
 2. John Engel: Anecdotally, has heard 5 feet of subsidence
 - D. Ryan: Fill material for dikes themselves
 1. Borrow ditches are visible inside dike, left from construction
 2. It would be hard to remove all the dike material
 3. A lot was brought in (not all from borrow ditches)
 - E. John Engel: Question for fish guys about connectivity
 1. What are benefits of one main point of connectivity
 2. Vs. many little breaches along the dike?
 3. Casey:
 - a. Not known; no one has ever tried the latter
 - b. They may try it at Spencer Island, near the breach at the N end
 - F. Ryan: Full tidal vs. muted tidal influence

1. Big problem with muted tidal influence: how much time water is flowing
 2. Full tidal is ideal
 - a. Different ecosystems at different levels
 - b. Provide different habitat
 - c. Diverse fish habitat through different flow levels and seasons
 3. Casey:
 - a. But we do know a lot about salinity, flow, etc.
 - b. As they relate to plants
 - c. As well as some limits on fish usability
 - G. Ryan: Recommend edge habitat? Strategies, etc.?
 1. Janne:
 - a. Subsidence since diking can be problematic
 - b. When flooded, water can be too deep
 - c. You'll just get mud flat
 - d. Some evidence: ~100 years before siltation yields emergent marsh
 - H. John Engel: Important to think about infrastructure within the diking district
 1. 10-11 miles of dikes, pump station, etc.
 2. We need to think about how that dike system affects regional infrastructure
 - a. US-2
 - b. City of Everett water supply lines
 - c. Gas pipeline
 3. Dikes are maintained by farmers on the island
 4. Keep this in mind through the process
- IV. Stop 4 – Diking District 6 restoration project – Not visited due to time constraints.