



September 5, 2007

Ms. Gail Terzi
U.S. Army Corps of Engineers
4735 East Marginal Way South
Seattle, Washington 98134

Subject: Reinitiation of Section 7 Consultation for the Clear Valley Environmental Farm Project (HUC 171100070201, Nookachamps Creek)

Dear Ms. Terzi:

2200 Sixth Avenue
Suite 1100
Seattle
Washington
98121

The purpose of this letter is to request reinitiation of Endangered Species Act (ESA) Section 7 consultation with the National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NOAA Fisheries), regarding the Skagit Environmental Bank Habitat Restoration Project at Clear Valley Farm.

(206) 441-9080
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Background

Several consultation documents were previously submitted to NOAA Fisheries and the United States Fish and Wildlife Service (USFWS) regarding the Skagit Environmental Bank Habitat Restoration Project. These documents include the following:

- Biological Assessment (Herrera 2005)
- Addendum to the Biological Assessment (Herrera 2006).

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In a letter dated April 7, 2006, the U.S. Army Corps of Engineers (COE) requested NMFS and USFWS concurrence with determinations of “may affect, not likely to adversely affect” for Puget Sound (PS) chinook salmon, PS chinook salmon critical habitat, bull trout, and bull trout proposed critical habitat (see Attachment A). The COE also asked for concurrence with a “no jeopardy” determination of effect for PS steelhead. On July 25, 2006, NOAA Fisheries concurred with the findings contained in the Biological Assessment and the addendum, and with the COE’s determinations (see Attachment B). On October 5, 2006, the USFWS concurred with the findings contained in the Biological Assessment and the addendum, and with the COE’s determinations (see Attachment C).

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97209

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Since receiving concurrences from NOAA Fisheries and USFWS, the project elements have changed slightly. The design changes were recommended by the Mitigation Bank Review Team (MBRT), and generally provide additional environmental protection. In addition, after receiving concurrence from the services, the Puget Sound distinct population segment (DPS) of steelhead (*Oncorhynchus mykiss*) was listed as a threatened species under the ESA. The steelhead listing was published in the Federal Register on May 11, 2007 (72 FR 26722), and took effect on June 11, 2007. Critical habitat designation for this population segment is currently under development.

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98382

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The minor changes to the project design are expected to have the same effects on bull trout, bull trout critical habitat, PS chinook salmon, and PS chinook salmon habitat as those described in the Biological Assessment (Herrera 2005). Therefore, reinitiation of consultation with the USFWS is not expected to be required, and bull trout and PS chinook salmon are not discussed further in this letter.

Description of Project Changes

Clear Valley Environmental Farm, LLC and its design team met with the MBRT on May 30, 2007, to discuss the site design as shown in the June 2006 preliminary plan set. A revised set of drawings was submitted to the MBRT on July 20, 2007 (see Attachment C). Listed below are descriptions of the changes that were made to the project design in response to the MBRT's comments at the May 30th meeting:

1. The number of engineered log jams (ELJs) and their locations have been finalized (see drawing C-1). Originally, three ELJs were proposed, along with two possible additional ELJs. In the new design, only three ELJs will be installed: one in the main stem of Nookachamps Creek and two in the east fork of Nookachamps Creek. The location of ELJ #1 was moved upstream of the Nookachamps bridge in order to remain within project boundaries. ELJs #2 and #3 remain in the same location as the previous design.
2. A 150-foot buffer is required to surround the entire site (see drawing C-1), per MBRT's comments during the meeting on May 30, 2007. Therefore, the limits of the mitigation bank and the buffer boundary changed slightly. The mitigation bank boundary was shifted approximately 300 feet southeast, and now matches a portion of the Clear Valley Farm property boundary, adjacent to State Route (SR) 9. The proposed buffer area between the project site and SR 9 is forested upland that includes an 8- to 10-foot-high sloped road prism. The total buffer area on the site increased from 50 acres to 83 acres. The total area of the mitigation bank (including buffers) increased from 375 acres to 397 acres.
3. Upland and wetland shrub mosaics were added to the landscape design to provide additional diversity in habitat types throughout the site.
4. There are currently a total of 37 monitoring wells on the site. Originally, there was a discrepancy on the plans, as a well was referred to as Number 38. The additional wells include those that were installed along the Clear Valley Farm property boundary in order to monitor ground water levels.

Steelhead Occurrence in the Action Area

The action area as defined in the Biological Assessment contains a portion of the main stem and the east fork of Nookachamps Creek, which is located in the Skagit River basin (see Figure 1). Information about steelhead in this basin is currently being collected, and some inconsistencies exist regarding the data. According to Acosta, the Skagit River basin contains two steelhead stocks: Skagit River summer-run steelhead and Skagit River winter-run steelhead (Acosta 2007). Up to 95 percent of steelhead occurring in the watershed are classified as winter-run, and the remainder are classified as summer run (USDA Forest Service 1996). Both stocks are considered part of the Puget Sound DPS. The presence of summer-run steelhead in the Skagit River basin has not yet been confirmed by the biologists in the La Conner office of Washington Department of Fish and Wildlife (WDFW), although it is possible that a small population exists (Barkdal 2007).

Summer-run Steelhead

If summer-run steelhead of the Puget Sound DPS exist in the Skagit basin, the fish would be expected to migrate from the Puget Sound into the Skagit River from late May to October. The steelhead may then migrate upstream to reach spawning grounds in the tributaries. The status of this stock of summer-run steelhead was rated by WDFW as “unknown” (Acosta 2007).

Winter-run Steelhead

Adult winter-run steelhead of the Puget Sound DPS migrate into the Skagit River system between December to March and distribute themselves throughout the Skagit basin, including into the east fork and main stem of Nookachamps Creek. Spawning occurs between January and June, with most spawning activity taking place in the main Skagit River and large side channel habitats. Juvenile out-migration of winter-run steelhead in this system typically occurs from March to June. The status of this stock of winter-run steelhead was rated by WDFW as “depressed” due to low abundance levels and poor productivity (Acosta 2007).

Puget Sound DPS steelhead are reported to use both the main stem and east fork of Nookachamps Creek (Barkdal 2007). Winter-run steelhead migrate upstream through the action area in both the main stem and the east fork of Nookachamps Creek. Winter-run steelhead rearing and spawning grounds are reported to be present upstream of the action area in both forks of Nookachamps Creek. Rearing grounds in the east fork of Nookachamps Creek are located above River Mile (RM) 3.0, near the confluence with Turner Creek, which is east of the action area; spawning grounds begin less than 1 mile above that point (WDFW 2007). In the main stem of Nookachamps Creek, rearing occurs just above Big Lake, which is over half a mile south of the action area; spawning grounds begin less than 1 mile above the lake (WDFW 2007). Winter-run steelhead are expected to migrate downstream in the spring.

Stream Temperature Data

A data logger located at St-3 on the main stem of Nookachamps Creek (see Figure 1) recorded stream water temperatures from October 15, 2005, through June 22, 2006 (see Table 1). Because water levels fell below the level of the data gauge in the summer, water temperatures were not measured by the data logger after June 22, 2006. Therefore, on August 4, 2007, a hand-held thermometer was used to collect water temperature data at St-3 along the main stem of Nookachamps Creek and at St-5 along the east fork of Nookachamps Creek. The temperatures were taken at two depths in each location, and those findings were averaged (see Table 1).

Table 1. Maximum water temperatures recorded in the main stem of Nookachamps Creek.

Date	Time	Location	Method	Temperature
10/15/05	9:46	St-3	Data logger	24.9°C (76.8°F)
6/22/06	17:46	St-3	Data logger	22.4°C (72.3°F)
8/4/07	10:00	St-3	Hand-held thermometer	20.0°C (68.0°F)
8/4/07	11:00	St-5	Hand-held thermometer	20.0°C (68.0°F)

The temperatures measured by the data logger in the main stem of Nookachamps Creek in 2005 through 2006 significantly exceed those considered to be suitable for anadromous salmon spawning and rearing (see Table 2). Water temperatures outside the optimal growth range will typically lead to avoidance behavior in fish (Selong et al. 2001). High temperatures were measured both before and after the June 15 through August 31 work window. Therefore, it is likely that the temperature of the stream during the approved in-water work window for the project would also be too high to support anadromous salmonids. The August 2007 temperature checks confirm this assumption of high stream temperatures in the summer. According to WDFW, it is very unlikely that steelhead would be present in these streams during the summer months, due to high temperatures and low dissolved oxygen levels (Barkdal 2007). Therefore, steelhead are not expected to be present in the action area during the fish work window.

Direct Adverse Effects

The potential direct adverse effects of the project on Puget Sound DPS steelhead are expected to be minimal, and are similar to those described for bull trout and chinook salmon in the Biological Assessment (Herrera 2005). It is not likely that steelhead will be present in the action area during construction due to high water temperatures and low dissolved oxygen levels in the streams (Barkdal 2007). Adult steelhead are believed to have the ability to detect disturbance, principally noise and slightly increased sediment loads in the water column caused by construction (Lohn 2006). Therefore, they would be expected to avoid the construction site. Nonetheless, any steelhead present in the construction area would be moved downstream during the fish exclusion procedure proposed as part of the project (dewatering and dam and diversion channel construction). If adult steelhead were to occur in the action area, the noise and suspended sediment levels associated with construction are not expected to rise to a degree that would cause harm to the fish.

Table 2. Estimates of thermal conditions known to support various life-history stages and biological functions of bull trout and anadromous salmon.^a

Consideration	Anadromous Salmon	Bull Trout
Temperature of common summer habitat use	10–17°C (50–63°F)	6–12°C (43–54°F)
Lethal temperatures (one week exposure)	Adults: >21–22°C (70–72°F) Juveniles: >23–24°C (73–75°F)	Juveniles: 22–23°C (72–73°F)
Adult migration	Blocked: >21–22°C (70–72°F)	Cued: 10–13°C (50–55°F)
Swimming speed	Reduced: >20°C (68°F) Optimal: 15–19°C (59–66°F)	
Gamete viability during holding	Reduced: >13–16°C (55–61°F)	
Disease rates	Severe: >18–20°C (64–68°F) Elevated: 14–17°C (57–63°F) Minimized: <12–13°C (54–55°F)	
Spawning	Initiated: 7–14°C (45–57°F)	Initiated: <9°C (48°F)
Egg incubation	Optimal: 6–10°C (43–50°F)	Optimal: 2–6°C (36–43°F)
Optimal growth	Unlimited food: 13–19°C (55–66°F) Limited food: 10–16°C (50–61°F)	Unlimited food: 12–16°C (54–61°F) Limited food: 8–12°C (46–54°F)
Smoltification	Suppressed: >11–15°C (52–59°F)	

Source: Poole and Berman (2001).

^a These numbers do not represent rigid thresholds, but rather represent temperatures above which adverse effects are more likely to occur. In the interest of simplicity, important differences between various species of anadromous salmon are not reflected in this table, and requirements for other salmonids are not listed. Likewise, important differences in how temperatures are expressed are not included (e.g., instantaneous maximums, daily averages, etc.).

Any direct effect on steelhead, their prey, or their habitat would be short-term in nature, discountable, and insignificant. The following project-related actions may affect Puget Sound DPS steelhead:

- **Stream diversion and fish handling.** Fish handling and dewatering activities during in-water construction work proposed for Phase 1 may harass or harm fish that will be directly handled during the procedure. Fish handling may induce responses ranging from behavioral changes to fatality. Dewatering has the potential to strand fish that were not captured prior to the removal of water, thus potentially causing stress or death during the construction period. Work proposed for Phase 2 includes the construction of back channels designed to carry high flows present in winter months. This channel work will not require fish handling because the new channels will not be hydrologically connected with the main stem or the east fork of Nookachamps Creek until the end of construction. Regardless, the likelihood of steelhead being present in the streams during the time of construction is very low, due to high temperatures and low

dissolved oxygen levels. Therefore, the probability that this project will require steelhead to be handled is low.

- **Sediment-laden runoff.** The activities associated with the construction of the engineered logjam structures, habitat improvements, stream bank stabilization, and stream diversion could increase the delivery of fine sediment to the main stem and the east fork of Nookachamps Creek. Fine sediments may influence egg survival and emergence success of the salmonid species that spawn in the project action area. However, any sedimentation problem occurring during project construction will be temporary. In addition, because of the best management practices (BMPs) that will be implemented as part of this project, no significant impacts on water quality are expected (see Biological Assessment [Herrera 2005] for a description of BMPs). The hydraulic project approval to be obtained for this project will specify additional measures for avoiding impacts.
- **Increased turbidity.** Increased sediment delivery to the main stem and the east fork of Nookachamps Creek would increase turbidity, potentially affecting steelhead. In conditions of increased turbidity, steelhead and other fishes may temporarily avoid areas downstream of the disturbance. However, because of the best management practices that will be implemented as part of the project, significant increases in turbidity are not expected to result from construction activities.
- **Accidental spills.** Steelhead are not expected to be affected by any spill because best management practices will be implemented to avoid or minimize all potential impacts related to accidental spills of construction-related chemicals.
- **Vegetation removal.** Some vegetation will be removed along the stream banks within the project area, which could temporarily affect fish habitat. However, native species will be planted as part of the project to replace the affected riparian and wetland vegetation along the stream bank, enhancing the existing habitat for steelhead and other salmonid species.

Direct Beneficial Effects

The proposed restoration project will restore reaches of the main stem and east fork of Nookachamps Creek and their associated palustrine and riverine wetlands. As described in the Biological Assessment (Herrera 2005), the project will improve water quality in the lower Skagit River watershed, improve hydrologic processes, improve fish habitat, and improve wildlife habitat.

The project will raise groundwater levels, improve groundwater recharge, and provide more storage during floods.

Although fish habitat may be slightly altered in the project area, these changes are expected to produce only minor changes in prey abundance or availability. Both prey abundance and availability are expected to return to pre-construction levels shortly after completion of each phase. Furthermore, the overall effect of the project is likely to increase productivity, as ELJs and an improved riparian forest are expected to increase invertebrate and vertebrate densities.

Indirect Effects

As described in the BA (Herrera 2005), no indirect effects are expected to occur after the mitigation bank has been constructed. The project will not promote future development. Any potential adverse impacts are associated only with construction and will be temporary.

Determination of Effect

The project **may affect** Puget Sound DPS steelhead because:

- The action area provides habitat for Puget Sound DPS steelhead.
- The main stem and east fork of Nookachamps Creek are known to be a route for steelhead that are migrating to rearing and/or spawning grounds upstream of the action area.

The project is **not likely to adversely affect** Puget Sound DPS steelhead because:

- Steelhead are not expected to be present during the time of in-water construction. In-water construction during all construction phases will occur between June 15 and August 31, when water temperatures and dissolved oxygen levels in Nookachamps Creek are generally unsuitable for steelhead.
- The post-construction operation of the project will benefit Puget Sound DPS steelhead and its habitat.
- All project activities will comply with Washington State water quality standards for turbidity.

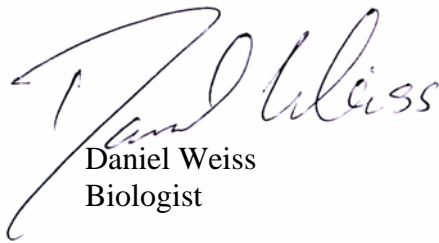
All potential adverse effects to DPS steelhead in the main stem and east fork of Nookachamps Creek are expected to be short-term in nature, discountable, and insignificant. The Skagit Environmental Bank Habitat Restoration Project at Clear Valley Farm is designed to benefit steelhead and other fish species that utilize the main stem and east fork of Nookachamps Creek.

Ms. Gail Terzi
September 5, 2007
Page 8

Please call Dan Weiss at (206) 441-9080 if you require additional information or have any questions about the ESA Section 7 reinitiation.

Sincerely,

Herrera Environmental Consultants, Inc.



Daniel Weiss
Biologist

Enclosure: Attachment A – Letter to NOAA Fisheries and the USFWS from COE
Attachment B – Letter to COE from NOAA Fisheries
Attachment C – Letter to COE from the USFWS
Attachment D – Project Plan Set (July 2007)

cc: Clear Valley Environmental Farm, LLC

References

Acosta, Beth. 2007. Personal communication (email to Susan Wall, Herrera Environmental Consultants, Inc., Missoula, Montana, regarding unpublished report by Kevin Lautz, WSDOT hydrologist, Headquarters Division, on fish presence in the project area for SR 20 MP 100.7 on Skagit River). Biologist, Washington State Department of Transportation. June 14, 2007.

Barkdal, Bret. 2007. Personal communication (telephone conversation with Darcey Miller, Herrera Environmental Consultants, Inc., Seattle, Washington, regarding steelhead presence in Nookachamps Creek). Biologist, Washington Department of Fish and Wildlife, La Conner, Washington. August 23, 2007.

Herrera. 2005. Biological Assessment – Skagit Environmental Bank Habitat Restoration Project, Skagit County, Washington. Prepared for Clear Valley Environmental Farm, LLC, by Herrera Environmental Consultants, Inc., Seattle, Washington. November 2005.

Herrera. 2006. Addendum to the Biological Assessment for the Skagit Environmental Bank Habitat Restoration Project. Prepared for Clear Valley Environmental Farm, LLC, by Herrera Environmental Consultants, Inc., Seattle, Washington. March 22, 2006.

Lohn, D. Robert. 2006. Personal communication (letter to Michelle Walker, U.S. Army Corps of Engineers, Seattle, regarding ESA Section 7 consultation for Clear Valley Environmental Farm project.) Regional Administrator, NOAA Fisheries, Seattle, Washington. NMFS Tracking No. 2006/01512. July 25, 2006.

Poole, G.C. and C.H. Berman. 2001. Pathways of Human Influence on Water Temperature Dynamics in Stream Channels. *Environmental Management* 27:787-802.

WDFW. 2006b. SalmonScape database. Washington Department of Fish and Wildlife. Obtained August 21, 2007, from agency website:
<<http://wdfw.wa.gov/mapping/salmonscape/index.html>>.

Selong, J.H., T.E. McMahon, et al. 2001. Effect of temperature on growth and survival of bull trout, with application of an improved method for determining thermal tolerance in fishes. *Transactions of the American Fisheries Society* 130(6):1026-1037.

USDA Forest Service. 1996. Sauk River and Sauk River Forks Watershed Analysis. Mt. Baker-Snoqualmie National Forest, Darrington Ranger District, Washington.

FIGURE

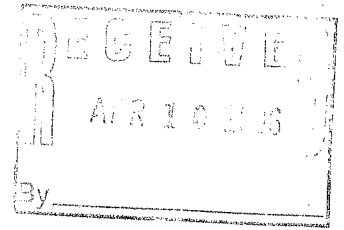
ATTACHMENT A

Letter to NOAA Fisheries and the
USFWS from COE



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
SEATTLE DISTRICT, CORPS OF ENGINEERS
P.O. BOX 3755
SEATTLE, WASHINGTON 98124-3755



April 7, 2006

Regulatory Branch

National Marine Fisheries Service
Mr. Steve Landino, Chief
Habitat Branch
510 Desmond Drive Southeast, Suite 103
Lacey, Washington 98503-1263

U.S. Fish and Wildlife Service
Ms. Pam Repp, Division Manager
Ecological Services
510 Desmond Drive Southeast, Suite 102
Lacey, Washington 98503-1263

Reference: Informal Consultations
And Request for Final Concurrence

Ladies and Gentlemen:

We have enclosed the following biological evaluations (BE) for your review:

200001502, IDC Enterprises (Uhrich)
200600098, Clear Valley Environmental Farm, LLC (Perry)
200600138, Redmond Public Works (Rahman), for NMFS only
200500082, Nigel Thompson and Alan Black (Liera)
200501250, Truesdell, Smith, Dow and Swing Pt LLC (Liera)

We have also enclosed the following Reference Biological Evaluation Specific Project Information Forms (RBE SPIF) for your review. These proposed projects meet most of the Conservation Measures for the Regional General Permit 1, 3, 4, 5 or 6 and/or the Phase I Programmatic Consultation.

200600102, Cameron and Linda Myhrvold (Powell)
200600221, Rachuna, Thaddeus, (Powell)
200501292, Washington State Parks and Recreation (Liera)
200501235, Jacobson, S&J and T&J Evans (Liera)

MEMORANDUM FOR THE SERVICES (MFS)

CENWS-OD-RG

Re: Endangered Species Biological Evaluation Review

Reference Number: 200600098

Applicant's Name: Clear Valley Environmental Farm, LLC

Project Manager: Randel Perry

Date: March 30, 2006

- I. Project Purpose, Description, and Location.** The proposed project is located in Nookachamps Creek approximately 1.5 miles northeast the urban center of Mount Vernon, Skagit County, Washington in Section 10, 11, 14 and 15, Township 34N, Range 4E.

The project includes the following elements:

- A. Restoration of reaches of the mainstem of Nookachamps Creek, the east fork of Nookachamps Creek, and associated floodplain wetlands. Proposed project will restore 13,000 feet of existing stream channel and riparian habitat, construct 9720 feet of new high-flow channel and restore 340 acres of palustrine emergent shrub-scrub and forested wetlands.
- B. An additional 81 acres of 150-foot buffer will be planted and preserved.

The purpose of the project is to restore reaches of the main stem of Nookachamps Creek and set up a wetland/habitat mitigation bank.

- II. Coordination History.** The U.S. Army Corps of Engineers (Corps) requested additional information from the applicant as detailed in the attached Memorandum for Reference (MFR) dated February 17, 2006. The applicant's response to the MFR is given in the attached addendum dated March 22, 2006.

III. Allowable Work Window.

Species	Start Work Window	End Work Window
PS Chinook/bull trout	July 1	September 30
All Species:	July 1	September 30

- IV. Determination of Effect.** The Corps has determined that the proposed project will have the following effects on listed species:

- A. *Puget Sound chinook*: may affect, not likely to adversely affect
PS chinook critical habitat: may affect, not likely to adversely affect
Coastal-Puget Sound bull trout: may affect, not likely to adversely affect
Bull trout proposed critical habitat: may affect, not likely to adversely affect
Puget Sound Steelhead: no jeopardy

The project will result in increased noise and sediment during construction activities, but the disturbance will be temporary. Work will be done during approved work windows to minimize impacts to salmonids.

B. *Bald eagle*: may affect, not likely to adversely affect

The project will result in increased noise during construction activities, but the disturbance will be temporary. The nearest nest is 0.6 miles away. Distance to the nearest foraging area is greater than a mile away. No pile driving will occur in the project area. No work window restrictions will apply.

V. Biological Evaluation. The biological evaluation prepared by Herrera Environmental Consultants, dated October, 2005 and the addendum dated March 22, 2006 adequately assess the impacts of the proposed project on the species referenced above.

VI. Special Conditions. To ensure the effects of the project will be as determined, the following conditions will be conditions of the Corps permit:

A. You must implement the ESA requirements and/or agreements set forth in the *Biological Evaluation, Skagit Environmental Bank Habitat Restoration Project, Skagit County, Washington* dated October, 2005 and the addendum dated March 22, 2006 in their entirety. The U.S. Fish and Wildlife Service concurred with a finding of "may affect, not likely to adversely affect" based on this document on [DATE] (USFWS Reference #). The National Marine Fisheries Service concurred with a finding of "may affect, not likely to adversely affect" based on this document on [DATE] (NMFS Reference #).

B. In order to protect Chinook salmon and bull trout, the permittee may conduct the authorized activities from July 1 through September 30 in any year this permit is valid. The permittee shall not conduct work authorized by this permit from October 1 through June 30 in any year this permit is valid.

VII. Essential Fish Habitat.

In accordance with the Essential Fish Habitat (EFH) requirements of the Magnuson-Stevens Fishery Conservation and Management Act, the Corps has determined that the proposal would not adversely affect EFH for federally-managed fisheries in Washington waters.

April 3, 2006
Date

Marcy Reed
Marcy Reed, BE Reviewer



US Army Corps
Of Engineers
Seattle District

Information Paper

Date:

May 14, 2002

Endangered Species Act Consultation Process¹

In accordance with Section 7 of the Endangered Species Act (ESA), the U.S. Army Corps of Engineers, Seattle District, Regulatory Branch (Corps) shall consult with the U.S. Fish and Wildlife Service (USFWS) and/or the National Marine Fisheries Service (NMFS)² on any proposed application for a Department of the Army permit - including Nationwide Permit - that may affect a federally listed species or its designated critical habitat. Specifics of this consultation process are set forth in 50 CFR Part 402 "Interagency Cooperation - Endangered Species Act of 1973, as Amended". There are two consultation processes under the ESA, informal consultation and formal consultation. You may check the status of the ESA consultation at NMFS via their website - www.nwr.noaa.gov. When entering your Corps reference number, be sure to enter the number in the following format - 2003-4-00976.

Informal Consultation - When the Corps has determined that a proposed activity will not result in an adverse affect³ to a listed species or critical habitat (which leads to a determination of "may affect, not likely to adversely affect") ESA provides a shortened coordination process called "informal consultation". The process is as follows -

Step 1. The Corp initiates consultation with the Services by written request enclosing sufficient biological information, such as a biological evaluation (BE).⁴

Step 2. With a goal of responding within "30 days", the Services review the BE for completeness and then issue a letter of concurrence to the Corps, request additional information/recommend project alterations, or issue a letter of nonconcurrence. The Corps will initiate "formal consultation" if the Services do not respond to the informal consultation. The Corps is working with the Services to develop reasonable timeframes for informal consultations.

Letter of Concurrence. If the Services provide a "letter of concurrence", the Corps will finalize the permit decision.

Request for Additional Information/Recommend Project Alterations. The Services may request additional information from the Corps to clarify the proposed project and its potential impacts or may recommend project alterations to minimize impacts. These requests may occur via a telephone conversation between the Services and the Corps, written requests, or direct coordination with the applicant. Any additional information or project alterations provided by the applicant are sent to the Corps and then forwarded to the Services.

¹The Corps has solicited comments from the USFWS and NMFS on this information paper. Certain processes outlined in this paper are proposed by the Corps, as the lead federal agency, and are not necessarily advocated by USFWS and NMFS.

² USFWS and NMFS are jointly referred to as "the Services".

³"Adverse affect" is defined as when a listed species or designated critical habitat is negatively impacted as a direct or indirect result of the proposed action or its interrelated or interdependent actions. The negative impacts are not insignificant or discountable. [ESA Section 7 Consultation Handbook, by NMFS and USFWS, dated March 1998]

⁴ The required biological information for Section 7 Consultation is outlined in 50 CFR 402.12.

ATTACHMENT B

Letter to COE from NOAA Fisheries

RECEIVED
JUL 28 2006
REGULATORY



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Northwest Region
7600 Sand Point Way N.E., Bldg. 1
Seattle, WA 98115

NMFS Tracking No.:
2006/01512

July 25, 2006

Michelle Walker
Corps of Engineers, Seattle District
Regulatory Branch CENWS-OD-RG
Post Office Box 3755
Seattle, Washington 98124-3755

Re: Endangered Species Act Section 7 Informal Consultation and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation for the proposed Clear Valley Environmental Farm Project (HUC 171100070201, Nookachamps Creek).

Dear Ms. Walker:

This correspondence is in response to your request for consultation under the Endangered Species Act (ESA). Additionally, this letter serves to meet the requirements for consultation under the Magnuson-Stevens Fishery Conservation and Management Act (MSA).

Endangered Species Act

The Army Corps of Engineers (COE) submitted a Biological Evaluation (BE) and a Memorandum for the Services to the National Marine Fisheries Service (NMFS) for the above referenced project on April 10, 2006 and requested NMFS' concurrence with the following determinations: (1) "may affect, not likely to adversely affect" Puget Sound Chinook (*Oncorhynchus tshawytscha*) salmon (PS Chinook), (2) "may affect, not likely to adversely affect" designated critical habitat for PS Chinook. PS Chinook was listed as threatened under the ESA on March 24, 1999 (50 CFR 223 and 224). Critical habitat (CH) for PS Chinook was designated on September 2, 2005 (70 FR 52630) and became effective on January 2, 2006. The proposed project is located within designated CH of PS Chinook.

The COE proposes to issue a permit, under Section 404 of the Clean Water Act, to Clear Valley Environmental Farm, LLC (the applicant) to restore selected reaches of the stream and create approximately 311 acres of wetland in the Nookachamps Creek watershed. The applicant proposes to install a total of four engineered log jams (ELJ), plant a total of 81 acres within a 150 foot wide buffer along 13,000 linear feet of existing stream channel, and reestablish 311 acres of wetland. The applicant is in the process of establishing a wetland mitigation bank for the 311 acres that they are creating. The COE is requesting consultation on only the construction of this project. The COE has agreed to consult with NMFS on each future activity that will withdraw "credits" from the proposed wetland mitigation bank.



The project will involve intensive earth movement and will be constructed in three phases, over five years. Phase 1 includes filling of all drainage ditches and constructing four ELJs. The fill and placement of ELJs is expected to raise the groundwater level and establish some wetlands. Phase 2 includes wetland planting, according to monitoring of hydrologic conditions. Phase 3 will include the excavation in the action area to remove non-hydric soils in areas that were designed to become wetlands, and will form islands that will benefit aquatic and wildlife habitat. The applicant will ensure the depth of excavations would support forested wetlands. PS Chinook use the East Fork Nookachamps Creek for spawning, generally spawn at least a mile upstream of the action area. Juvenile PS Chinook use the action area for refuge, feeding and migration.

There will be two primary effects of the action. One effect will be temporary effects to water quality during various in-water construction activities throughout the project. Another effect will be the project's long term effects to hydrology within the reach and action area.

Species Determination, Puget Sound Chinook Salmon

NMFS analyzed the potential impacts of the project on PS Chinook and determined that the impacts will be discountable and insignificant.

The effects will be discountable because PS Chinook are not expected to be present during construction. In-water construction during all phases will occur between June 15 and August 31, when water temperatures in Nookachamps Creek are unsuitable for juvenile Chinook. Juvenile PS Chinook have generally moved out of the river by June. Adult PS Chinook migrate through the action area usually beginning in September.

Few adults may occur in the project area in late August during their spawning migration; however NMFS expects effects to be insignificant. Adults can detect disturbance, principally noise, and slightly increased sediment loads in the water column caused by construction and avoid the construction site. Even if adults occur in the action area, construction effects (e.g. low levels of noise and suspended sediment) are not expected to rise to the level of harm.

Although habitat may be slightly altered in the project area, these changes are expected to produce only minor changes in prey abundance or availability which will return to pre-construction levels shortly after completion of each phase. Furthermore, the overall effect of the project is likely to increase productivity as ELJs and an improved riparian forest is expected to increase invertebrate and vertebrate densities. Because prey abundance will be re-established before juvenile PS Chinook return to the action area the following spring, the effects to PS Chinook are expected to be insignificant.

The changes in hydrology are not designed to reduce surface flow during the summer or increase the flow during storms in the East Fork or mainstem Nookachamps Creek. The project is designed to do the opposite, which is beneficial to PS Chinook. The project will raise groundwater levels, improve groundwater recharge, and provide more storage during floods. These improvements in hydrology are counter to many areas throughout the ESU that are doing the opposite as land is

converted from natural to developed.

Because all potential adverse effects to PS Chinook are discountable or insignificant, NMFS concurs with the COE effect determination of "may affect, not likely to adversely affect" for PS Chinook.

Critical Habitat Determination, Puget Sound Chinook Salmon

Critical Habitat for PS Chinook was designated on September 2, 2005 (70 FR 52630) and became effective on January 2, 2006. Critical habitat consists of six Primary Constituent Elements (PCEs) for the PS Chinook Evolutionary Significant Unit (ESU). Freshwater rearing areas, and migration corridors (PCEs 2, and 3) occur within the action area.

Site	Essential Physical and Biological Features	Species Life Stage
Freshwater rearing	Water quantity and floodplain connectivity	Juvenile growth and mobility
	Water quality and forage	Juvenile development
	Natural cover ^a	Juvenile mobility and survival
Freshwater migration	Free of artificial obstructions, water quality and quantity, and natural cover ^b	Juvenile and adult mobility and survival

^a Natural cover includes shade, large wood, log jams, beaver dams, aquatic vegetation, large rocks and boulders, side channels, and undercut banks.

^b Forage includes aquatic invertebrate and fish species that support growth and maturation.

NMFS analyzed the potential effects of the project on PS Chinook and determined that the effects will be discountable and insignificant.

The effects will be discountable. Because PS Chinook are not expected to be present during construction (June 15, - August 31), the conservation value of the PCEs will not be reduced. The effects of the proposed project will be insignificant because the project will not result in a long term reduction in the amount or quality of rearing habitat in Nookachamps Creek, and will not impede migration for juvenile and adult PS Chinook. All riparian vegetation that are removed during the project will be replaced with native trees and shrubs. The proposed ELJs, riparian plantings, and wetland establishment will improve long term physical processes at Nookachamps Creek.

Because all potential adverse effects to PS Chinook are discountable or insignificant, NMFS concurs with the COE's effect determination of "may affect, not likely to adversely affect" for PS Chinook critical habitat.

This concludes informal consultation pursuant to the regulations implementing the ESA, 50 CFR 402.10. The COE must re-analyze this ESA consultation if new information reveals effects of the action that may affect listed species in a way not previously considered, the action is modified in a

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manner that causes an effect to the listed species or critical habitat that was not previously considered, or a new species is listed, or critical habitat designated, that may be affected by the identified action.

Magnuson-Stevens Fishery Conservation and Management Act

Federal agencies are required, under section 305(b)(2) of the MSA and its implementing regulations (50 CFR 600 Subpart K), to consult with NMFS regarding actions that are authorized, funded, or undertaken by that agency that may adversely affect Essential Fish Habitat (EFH). The MSA (section 3) defines EFH as "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." If an action would adversely affect EFH, NMFS is required to provide the Federal action agency with EFH conservation recommendations (section 305(b)(4)(A)). This consultation is based, in part, on information provided by the Federal agency and descriptions of EFH for Pacific salmon contained in Appendix A to Amendment 14 to the Pacific Coast Salmon Plan (August 1999) developed by the Pacific Fishery Management Council and approved by the Secretary of Commerce (September 27, 2000).

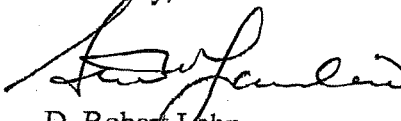
The proposed action is described in pages 7 through 36 of the BE. The proposed action includes habitats which have been designated as EFH for various life stages of Chinook, coho (*O. kisutch*), and Puget Sound pink (*O. gorbuscha*) salmon.

EFH Conservation Recommendations: Because the habitat requirements (*i.e.*, EFH) for the MSA-managed species in the action area are similar to that of the ESA-listed species, and because the conservation measures that the COE included as part of the proposed action to address ESA concerns are also adequate to avoid, minimize, or otherwise offset potential adverse effects to designated EFH, conservation recommendations pursuant to MSA [section 305(b)(4)(A)] are not necessary. Since NMFS is not providing conservation recommendations at this time, no 30-day response from the COE is required [MSA section 305(b)(4)(B)].

This concludes consultation under the MSA. If the proposed action is modified in a manner that may adversely affect EFH, or if new information becomes available that affects the basis for NMFS's EFH conservation recommendations, the COE will need to reinitiate consultation in accordance with the implementing regulations for EFH at 50 CFR 600.920(l).

If you have questions regarding either the ESA or EFH consultation, please contact Joel Moribe of the Washington Habitat Branch Office at (206) 526-4359, or by electronic mail at joel.moribe@noaa.gov.

Sincerely,


D. Robert Lohn
Regional Administrator

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cc: Randel Perry, COE
Gail Terzi, COE
Martha Jensen, USFWS

ATTACHMENT C

Letter to COE from the USFWS



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Western Washington Fish and Wildlife Office
510 Desmond Dr. SE, Suite 102
Lacey, Washington 98503



In Reply Refer To:
1-3-06-I-0273

Michelle Walker, Chief Regulatory Branch
Seattle District, Corps of Engineers
ATTN: Regulatory Branch (Perry)
P.O. Box 3755
Seattle, Washington 98124-3755

Dear Ms. Walker:

Subject: COE #200600098; Clear Valley Environmental Farm, LLC

This is in response to your request for consultation dated April 7, 2006, and enclosed Biological Evaluation for the proposed wetland and stream restoration work on the Clear Valley Environmental Farm. The proposed action is being conducted to serve as a mitigation bank for future highway projects in the area. The site was a dairy farm located along the East Fork and mainstem of the Nookachamps Creek in Skagit County, Washington (T34N, R04E, Sections 10, 11, 14 and 15).

The applicant is proposing to restore approximately 13,000 feet (2.5 miles) of stream channel and floodplain habitat by filling agricultural drainage ditches, constructing 9,720 feet of new off-channel habitat, installing 4 engineered log jams, restoring 340 acres of palustrine and forested wetlands, and planting 81 acres of trees in the riparian buffer. The site will be protected from development and other incompatible uses with a permanent conservation easement. Work will be conducted in three phases and is expected to take approximately 5 years to complete.

Phase I is scheduled to begin in the summer of 2007 and will include filling approximately 8,550 linear feet of drainage ditches and constructing an engineered log jam in the mainstem and three engineered log jams in the East Fork of the Nookachamps. Phase II, scheduled to be conducted in 2009, will include grading and leveling the site to restore hydrologic connection in the floodplain and constructing new side channels in areas where they historically occurred. Phase III, scheduled for 2011, will include final hydrologic connections and planting of native vegetation.



All in-stream work will be conducted during the summer low flows and will be limited to the approved work window (June 15 through September 30). Construction equipment will include the use of excavators, backhoes, front-end loaders, vibratory pile driver, and dump trucks. The site will be accessed using existing agricultural roads. All exposed areas will be seeded and/or planted before the winter rains to prevent erosion. Construction of the engineered log jams will require re-routing the stream around the work area to minimize turbidity. New channel segments will be constructed in the dry and allowed to stabilize for a season before being connected to the Creek.

The letter requests our concurrence with your finding that the project “may affect, but is not likely to adversely affect” the bull trout (*Salvelinus confluentus*) and the bald eagle (*Haliaeetus leucocephalus*). The project is not in designated critical habitat for the bull trout. This request was submitted in accordance with section 7(a)(2) of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*).

Based on the information provided, we have concluded that effects to the federally listed bull trout and bald eagle associated with the proposed project would be insignificant or discountable. Therefore, we concur with your “may affect, not likely to adversely affect” determination for these species. Our conclusion is based on the following rationale.

Bull Trout

Bull trout likely use the lower Nookachamps seasonally (fall/winter) for foraging and overwintering. There is one record of a subadult bull trout in Lake Creek, a tributary to Nookachamps in 1994 (pers. com. C. Kraemer). However, according to the Biological Evaluation, there are no records of bull trout observations during annual salmon spawning surveys conducted by the Washington State Department of Fish and Wildlife.

Nookachamps Creek is on the Washington Department of Ecology’s 303(d) list of impaired waters for high summer temperatures and low dissolved oxygen. Temperatures in the mainstem can reach 20°C and may be as high as 24°C in the East Fork during the low flow period. The action area is 1.5 miles upstream of the Skagit River, which is used year-round by bull trout. Project-related turbidity is not expected to reach the river because most of the suspended sediments will settle out in Nookachamps Creek. Furthermore, because a vibratory pile driver will be used to install the wooden anchor pieces for the engineered log jams, no harmful effects from pile driving are anticipated.

Because the in-water work will be conducted during the time of year when oxygen levels are low and temperatures are unsuitable for bull trout, it is unlikely that they will be present in the action area during construction. Thus, effects to bull trout from project-related activities are considered discountable. The project will improve habitat conditions for all fish in the action area. Thus long-term effects to bull trout and their prey are considered beneficial.

Bald Eagle

The proposed action will not result in the loss or modification of suitable nesting, roosting, or

perch tree habitat for bald eagles. There is one active bald eagle territory adjacent to Barney Lake at the confluence of the East Fork and mainstem Nookachamps. An equipment access route and new side channel site will be located just across the creek from the nest site (within 0.1 mile). Although the bald eagles that occupy this territory are accustomed to agricultural operations during the nesting season, construction activities will be close to the nest, are stationary, and are longer in duration than farming activities such as mowing. Therefore, the site will be monitored by a qualified biologist to ensure that project-related activities do not cause disturbance to the eagles. Construction will be sequenced such that operations in the vicinity of the nest will occur late in the nesting season and will be halted if the eagles show signs of agitation. Because the nest site will be monitored and activities adjusted to avoid disturbance, effects to nesting bald eagles are considered insignificant.

Bald eagles forage along the Nookachamps and Skagit River all year. Since the water quality is often poor in Nookachamps Creek, the Skagit River provides the best foraging opportunities during the summer. Because foraging opportunities are limited in the action area, construction activities will be conducted during daylight hours, and sound levels associated with pile driving and/or equipment operations will not reach harmful levels, effects to foraging bald eagles are considered insignificant.

This concludes informal consultation pursuant to the regulations implementing the Endangered Species Act (50 CFR 402.13). This project should be re-analyzed if new information reveals effects of the action that may affect listed species or critical habitat in a manner, or to an extent, not considered in this consultation. The project should also be re-analyzed if the action is subsequently modified in a manner that causes an effect to a listed species or critical habitat that was not considered in this consultation, and/or a new species is listed or critical habitat is designated that may be affected by this project.

If you have any questions about this letter, please contact Martha Jensen at (360) 753-9000 or Tom McDowell at (360) 753-9426, of this office.

Sincerely,

/S/10/05/06/T McDowell/

Ken S. Berg, Manager
Western Washington Fish and Wildlife Office

cc:
WDFW Region 4

ATTACHMENT D

Project Plan Set (July 2007)