From: duane vaness
To: SM.NRCS.Pearson.Eddy
Subject: Duane Van Ess comments pearson eddy
Date: Tuesday, May 02, 2017 2:57:49 PM

To Dave Kreft or to Whom It May Concern:
Dated: 5/02/2017

I am the manager of parcel (022606-9043 and son of Douwe and Leona Van Ess, proprietors), that the Pearson Eddy Creek runs through in King County, and to further describe, just south of the Snohomish County boundary line. The Pearson Eddy Creek runs north through our parcel into Snohomish County for approximately 5,000+ feet, emptying into the Snoqualmie River. I am writing to express my comments in response to the Draft Environmental Assessment for the Pearson Eddy Wetland Reserve Program Restoration Project in Snohomish County, WA.

First and foremost, I must disagree that NRCS is proposing to re-establish the Pearson Eddy into its natural state. A report submitted by Steve Neugebauer dated May 1, 2017, successfully disputes its non-existence as far back in 1871.

Prior to the Pearson Eddy Projects being implemented, the Pearson Eddy Creek flowed in a northerly direction. Currently, it now runs in a southerly direction into our lands as described above in King County.

NCRS is proposing to place several log structures to raise the water table to 28 feet, which in effect raises our ground water to a level that prohibits the germination of seeding because the high water table keeps the ground saturated and drains slowly and even slower in a valley that has minimal elevation differences from our parcel to the WRP project site. For argument's sake we will say that surface water is ground level and above, and ground water is at ground level and below.

Second, the proposal to produce on 60-acres feed for habitat is not acceptable. The reason is that last year there were 200 acres of corn on the other side of the river that was not get harvested was left all winter. While some of the wildlife did graze on the unharvested corn, our parcel was still inhabited by wildlife that still ate our forage, leaving us without feed for our livestock (our livelihood). Our ability to generate income through our dairy farm has ceased – we sold our milk cows in January of this year because we were not able to sustain forage to feed our livestock. We are looking at other options, however, the WRP project will only endorse our failure in any future farming. I am asking you to seriously consider the farmers in this valley and their need to be able to farm the land in order to raise their families. While we are coming to the understanding that wildlife is a priority for the federal government, NRCS is not supportive of farming in the Snoqualmie Valley. We live here. We farm here. We raise our families here. We are struggling to have a sustainable business in farming to pass from our generation to the next.

With the implementation of the WRP Project it will extend the ponding of water longer in the summer. This is unacceptable. We need our farmland to dry out in the Spring for seeding. We cannot delay planting into the summer.

Adding less than 2 inches to flood water will have minor negative effects to the valley, is what is stated in the proposal. Every time one of these projects is implemented, you increase the volume of water that is left ponding for a longer period of time.

WRP proposal is stating that on a flooding impact level, we will have a rise of .042 on cross section line 1.52 which is located within 100 feet of the north boundary line in King County, WA. However, King County's zero tolerance rise level is .005. The .042 level is eight times the level that King County, WA allows in their regulations.

The proposal allows for the removal of any drain tile at construction. Why would the removal be allowed instead of replacement if any broken tile found? Drainage tiles help to move the water a bit quicker and you are taking away any opportunity of helping the water flow movement to occur.

Lastly, I would prefer No more WRP Projects – The program offered landowners an opportunity to establish long-term conservation, wildlife, practices and protection. These programs did not protect our farmland. In fact, these programs only served to enhance the wildlife that grazes off any land where there is forage. They do not know the boundary limits and therefore cross into territories where they are not desired. My farmland is a testimony to the abundance of unwanted water fowl.

Rachael Maggi from NRCS says that the Pearson Eddy Creek is not a good place for fish because the Creek is to warm for the fish so why is NRCS trying to go forward with these projects.

Thank You
Duane Van Ess
206 816 4669

To. Dave Kreft Date: 5/02/2017

USDA NRCS 316 W. Boone Ave, Suite 450, Spokane Wa 99201-2348

I am responding to the Draft Environmental Assessment for the Pearson Eddy WRP restoration project, Snohomish County, Washington.

It appears that there are limited ways to access the East side of the Pearson Eddy for maintenance,

A. being at the flood gate section, 2nd on the former Walt DeJong property. What happens when these parcels get subdivided, how will the newest property owners gain access to the East side of the Pearson Eddy if the crossings are not part of their land parcel? I do not think removing culverts and bridges are beneficial for access reasons.

2. The plan calls for planting along the Pearson Eddy, how would landowners clean (maintain) out the Pearson Eddy creek (slough, swale) if there are plantings along the sides of it.

3. The environmental checklist prepared Feb 19th, 2013 by Kathy Kilcoyne from NRCS and received by Snohomish County on 5/17/2013 says on page 3, that the Floodplain Easement has functioning ditches and drainage to the river, allowing drainage to continue as before. Our point of view is since the Pearson Eddy Creek runs through the FPE why not fix the drainage and ditches first to see how much water actually runs which way and how much water would run North in the Pearson Eddy Creek. We would like to see a clear understanding of what waters are supposed to flow in which direction. We would like to see which way the waters at the so called long lake (project) Pearson Eddy Creek would flow if the drainage in the FPE was functioning again. However the way we see things, Pearson Eddy Creek is not natural like Steve Neugebauer says, check Steve Neugebauer's report.

4. Page 2 of the said environmental checklist #11 says the WRP easement has approximately one mile of natural high bank along the Snoqualmie River, however page 4, section 12 C. asks if this is prime farmland, it says it's in part Puget Silty Clay loam, not drained however it is drained because of the drainage pump in the Pearson Eddy Creek that Larry Johnson references in the 2/11/2016 drainage report. It is protected as Kathy Kilcoyne says in her checklist on page 2 at the bottom dated 2/19/2013. We see that this is prime farmland. Our King County Washington farm plan also states that we have Puget Silty Clay loam soil which states is prime farmland as well. NRCS just got it wrong in the checklist.

5. Page 6 # 3, A in the said checklist asks if the is any surface water body including year around or seasonal, Kathy Kilcoyne makes no mention of Long Lake. In addition she also says Pearson Slough (un-named slough) is un-named however Snohomish County Washington calls it the Pearson Eddy Creek. However in the latest EA section 4.2.6 it says historic Long Lake is present. However on page 11 # 8 A, of the said checklist by Kathy Kilcoyne, she calls it Long Lake that is a historic swale that is presently connected to the deep ditch that flows to the Snoqualmie river. Which is it, is Long Lake there or isn't it? Or the question should be what does she mean when she says historic Long Lake? (what year would that be)

6. In the said checklist page 12, K proposed measures to avoid or reduce displacement impacts, if any: Kathy Kilcoyne answered NA. However there are impacts with backwater, waterfowl eating our forage, flood rise impacts. I even spoke with Kathy Kilcoyne in person on site about the impacts in the year 2010 on the above mentioned impacts, however Kathy Kilcoyne failed to address said issues.

7. On page 13, section I of said checklist proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any: Kathy Kilcoyne does not even answer the question. It is obvious that the said project is not compatible with existing uses, just look at all the negative accumulative affects that are happening in the community because of the NRCS projects.

8 The Feb 11, 2016 drainage report has our drainage ditch(#4 outlet) located in King County draining Snohomish County lands, however our pump and drainage ditch is only designated to drain said lands in King County and no lands in Snohomish County. Our Land Title specifically describes legal descriptions that are only described in King County Washington only. Said document goes on to say how pump costs will be divided up and so forth. The Pearson Eddy Creek now is running South into King County said ditch described above from Snohomish County and prior to the NRCS projects being implemented the said Creek ran North into Snohomish County.

The losses due to NRCS projects listed below are some of the losses we have incurred but not limited to.

Our pump is now not big enough to pump the additional waters that we are receiving from Snohomish County due to all the back water and so forth. In addition we have maintenance and energy costs over $25,000 associated with our pumping plant. We also now need a bigger drainage pump that is going to cost over $100,000.

9. We have had beef cows develop hoof rot in the past years since the NRCS projects have been underway because our lands are underwater due to backwater from the NRCS projects. The cows stand up to their knees in water thus developing hoof rot in there hooves making the animals a complete loss financially. We put a $3,000 value on each animal. We lost over 5 animals due to hoof rot totaling $15,000.

10. We have had over 20 acres under water for the majority of the year due to NRCS projects thus making the land a complete loss. The land produces 30 tons of forage per year. Each ton is $60 per ton. $1,800 an acre, totaling $36,000 a year for the past several years.

11. The waterfowl that lives in the NRCS projects has devoured our grass lands as well. Another $1,800 per acre per year on a non-disclosed amount of acreage.

12. The drainage report dated Feb 11, 2016 says the latest projects considered will raise the flood water .042 which is 8 times the amount allowed in King County Washington on section line 1.52 which is in King County Washington, this is unacceptable.

13. Appendix C talks about a 5” flood rise from the accumulative affects from all the NRCS projects, this is unacceptable, We believe an EIS is mandatory for the upcoming WRP projects.

Thank you

Steve Van Ess

SNOQUALMIE VALLEY
Watershed Improvement District

Dave Kreft, USDA – NRCS
316 W. Boone Ave. Suite 450, Spokane, WA 99201-2348
NRCS.Pearson.Eddy.comments@wa.usda.gov

May 2, 2017

Dear Mr. Kreft:

Thank you for the opportunity to provide comments on the *Pearson Eddy WRP Restoration Project, Draft Environmental Assessment* (EA), dated March 2017. Given the predicted rise in project-related flood elevations, loss of prime farmland, and overall project scale (e.g. 48,500 cubic yards floodway fill/excavation), potential project-related impacts are evident, and issuance of a Finding of No Significant Impact directly conflicts with the findings of the EA. Specifically, the SVWID concludes there ***will be a significant impact*** to the Water Resource Concern, **Water Quantity (Excessive Runoff, Flooding, or Ponding)**. The proposed project, as summarized in the *Hydraulic Impact Analysis* (Daniel Moore, March 2017), ***will increase flood levels in the regulatory floodway of the Snoqualmie River***. The SVWID is requesting an Environmental Impact Statement (EIS) with an alternative demonstrating no project-related increase in flood elevations.

The proposed Pearson Eddy WRP Restoration Project is located within the regulatory floodway, as indicated on FEMA and Snohomish County maps. Snohomish County Code 30.65.230 states that all encroachments, including fill, new construction, and other development are prohibited in the floodway if the action results in any increase in flood levels during the occurrence of the base flood discharge. The Pearson Eddy project is located just north of the King/Snohomish County line. Farms located in King County, within the SVWID are required to conform to the "zero-rise" standard, which prohibits any increase to the base flood elevation (equal to or greater than 0.01 foot) within the zero-rise floodway (King County Code 21A.24.250).

SVWID's member parcels are located within the Affected Environment described by the EA as the Floodplain scale (Snoqualmie River Watershed). Table 5-2 summarizes impacts to each Affected Environment from the No Action and Preferred Alternative. Table 5-2 suggests there are major short and long-term beneficial effects on SVWID member parcels. A rise in flood elevations, summarized as two inches in both the Economic/Social Resource Concerns (EA, pg. 36), and the March 2017 Hydraulic Analysis (pg. 12) is not a beneficial effect.

Based on the results of the EA, SVWID opposes an NRCS Finding of No Significant Impact. An increase in flood levels within the floodway is a *significant impact* and is prohibited by both Snohomish and King County codes. The SVWID cordially requests NRCS to develop an EIS, including a project alternative with ***no increase in flood levels during the occurrence of the base flood discharge.***

Sincerely,

Cynthia Krass
Executive Director

Cc: Josh Baldi, King County; Rebecca Samy, Snohomish County; David Raudabaugh, Washington Department of Ecology

May 2, 2017 Project Number: 02-016-033

Mr. David Kreft
USDA – NRCS
3016 West Boone Avenue
STE 450
Spokane, WA 99201-2348

SENT VIA USPS and E-MAIL: NRCS.Pearson.Eddy.comments@wa.usda.gov

RE: Comments on NEPA Pearson Eddy WRP Restoration Project Draft Environmental Assessment, Snohomish County, WA, Prepared by USDA Natural Resources Conservation Service, March 2017 in accordance with 42 U.S.C. 4321 et seq.; Executive Order 11514 (Rev.); Title 40 CFR parts 15001508, Title 7 CFR 2.62, and Title 7 CFR , Subtitle B, Chapter VI, Subchapter F, Part 650

Dear Mr. Kreft:

SNR has been retained by Mr. Steven Van Ess and other farmers of the Snoqualmie River Valley in King and Snohomish Counties, Washington to provide the following comments for the Draft Environmental Assessment (EA) for the Pearson Eddy WRP [Wetland Reserve Program] Restoration Project, prepared by USDA Natural Resources Conservation Service, March 17, 2016.

There are two parts to these comments, the first part provides comments to the Draft Environmental Assessment mentioned above and the appendices and the second part goes systematically through Title 7 CFR, Subtitle B, Chapter VI, Subchapter F, Part 650, providing comments on the NRCS's compliance with this section of the Code of Federal Regulations. These comments pertain to how the EA meets the requirements of NEPA as the NRCS has interpreted these requirements.

OVERVIEW

The Snoqualmie River extends from the western crest of the Cascade Range to the east to its confluence with the Skykomish River west of the City of Monroe, Washington, where the combined rivers become the Snohomish River, one of the larger rivers in the Puget Lowlands.

This river originates in glacially sculpted "valleys" of the western flank of the Cascade Range as three separate "forks"; the south fork that generally follows I-90 downslope from the Snoqualmie Pass area, the middle fork that has a headwater approximately 10 miles east of the south fork head waters and is approximately 2.5 miles north of the south fork, and the north fork with headwaters being located about as far east as the middle fork, but is about 10 miles north of the middle fork.

These "forks" of the Snoqualmie River begin at a relatively steep gradient, where sediments are being transported by relatively high velocity flows. The primary headwater source for these river forks is snow melt and precipitation; the lower reaches are also sustained/supplemented by ground water base flow in the form of unsaturated zone preferential flow.

The middle and south fork undergo a significant gradient change approximately 5 miles east of North Bend, Washington. The north fork has a significant gradient approximately 2 miles north of its confluence with the middle fork, approximately 1 mile north of North Bend, Washington. The south fork forms a confluence with the combined middle and north forks approximately ¼ of a mile to the west of where the north and middle forks form a confluence.

Once all three forks are combined, the Snoqualmie River flows through the Town of Snoqualmie Washington towards the 276 foot high Snoqualmie Falls, which isolates the upper reaches of the river from the lower reaches and prevents any spawning fish from being present in the upper reaches.

In 1899, the only obstruction anywhere on the Snoqualmie River became the Snoqualmie Falls electrical generation plant that had are relatively low dam across the crest of the falls to divert some of the river flow into the 8 foot diameter pipe that channeled the river water to a chamber with water paddles that converted the flow into 32,000 volts of electrical power.

This power plant general stayed the same until approximately 2008 when the power plat was scheduled for an upgrade which included the removal of the dam that crested the top of the Falls. This work was done under the oversight of the United Stated Department of Energy, which did not bother addressing potential environmental or human element impacts associated with the removal of the dam as required by NEPA.

In 2009 one of the largest know flood occurred on the Snoqualmie River, even though there were no 100 year storm events (1%), this flood ravaged the actual Snoqualmie River Valley (Figure 1), inundating the valley completely, even flowing over the only remaining access road to the eastern portion of the Snoqualmie River Valley, the Woodinville-Duvall Road, which had 3 – 4 feet of river water flowing over the top of the road up to the bridge at the entrance to the City of Duvall.

These floodwaters destroyed the asphaltic concrete road surface (Figure 2) on Woodinville – Duvall Road and halted all commerce and travel from the east side of the river valley including the Cities of Duvall and Carnation. The removal of the dam at Snoqualmie Falls is believed to be the reason this flood was one of the largest on record even though the storm events that occurred were not even close to 100 year storm events.

This is what happens when the potential impacts of an action by a governmental agency are not completely analyzed in a NEPA EIS and even an EIS can be wrong if the appropriate studies are not conducted by a multidisciplinary team of scientists and engineers.

Although the Department of Energy project was conducted directly in the mainstem of the Snoqualmie River, actions in the active floodway and even in the floodway fringe areas can also have dramatic impacts on the environment and the human element, especially if the required multidisciplinary scientific and engineers studies are not conducted on a river that now has no controls whatsoever.

The Snoqualmie River enters the Snoqualmie River Valley in Fall City where the Raging River forms a confluence with this River. The river valley is actually a structural feature with Horst and Graben geomorphology. This Valley is intensely faulted and it is believed that the main fault that bisects the Valley is an extension of the South Whidbey Island Fault Zone.

This main fault trends south then southeast where it is believe to intercept the Seattle Fault Zone in the Rattlesnake Mountains located south of North Bend, Washington.

Figure 1 - Image of the 2009 Snoqualmie River Flood after the dam at Snoqualmie Falls had been removed, King County, 2017

Figure 2 - Woodinville - Duvall Road after being overtopped by the 2009 Snoqualmie River Flood, King County, 2017

This structural feature has been sculpted by ongoing continental and alpine glaciation advances and retreats, with the most recent continental glaciation advance and retreat being the Vashon Stade of the Fraser glaciation events, and part of the last Cordilleran continental glaciation event, locally called the Vashon Stade.

During the retreat of the Vashon Stade, the Snoqualmie River Valley became glacial Lake Snoqualmie as did all of the troughs to the west, such as glacial Lake Sammamish, glacial Lake Washington, and glacial Lake Russell (which occupied much of what is now the Puget Sound).

When the continental glacial ice sheet that blocked the Strait of Juan de Fuca (the Juan de Fuca Lobe), retreated significantly enough to float and then breakup into berg ice, the entire Puget Lowlands rapidly drained, converting the former lakes into large meltwater fed river valleys. The glacially fed rivers subsided as the continental glacial ice fully retreated from the Puget Lowlands approximately 9,500 years ago and much of the alpine glaciers had also retreated to the peaks of the Cascade Range and the tops of the Strato volcanos. This began the current interstade where underfit rivers and streams occupied relict glacial meltwater channels, including the Snoqualmie River.

The glacial recession left extensive glacial artifacts including the remains of large delta complexes that formed in the glacial lakes. These delta complexes were bisected by the rivers that created the deltas when the lakes drained and rejuvenated these rivers.

These delta complexes can be found in virtually every relict glacial river valley the trends east to west, near or in the foothills of the Cascade Range. It is these relict glacial deltas that create the serious landslide hazards in these relict glacial meltwater channel valleys, many of which are occupied by underfit rivers and streams. In fact the Hazel (Oso) Landslide originated on one of these relict deltas.

The Snoqualmie River Valley has extremely complex geology and hydrology and this geology and hydrology is not static, it is constantly changing for many reasons, including changes in the actual geology and because the geomorphology of the river valley is relatively flat with a very low slope to the north. This is why the Snoqualmie River has a meandering channel (mainstem) in this Valley and why the River can be extremely dangerous during floods.

Due to the geomorphology of the Snoqualmie River Valley, the floodplain for the river can vary significantly for several reasons but one of the reasons pertains to the width of the portion of the Valley the river is flowing through and the types of meanders that are present. This is also affected by the specific geomorphology of the area and any obstructions caused by the structural geology of the area.

The area where the NRCS has chosen for its WRP Restoration Projects happens to be in an area where the river valley begins to narrow from approximately 2.1 miles wide to approximately 1.1 miles mile wide. The areas where the “restoration projects” have been conducted and are proposed to be conducted range from 1.2 to 1.1 miles wide.

This causes the floodway and floodway fringe of the river to be larger in proportion to the total floodplain, due to the geomorphology of the valley, the narrowness of the valley, and the meander pattern of the river. This means in some cases there is actually no 1% floodplain because the entire valley floor can flood much more frequently do to the reasons discussed above, which is important because the hydrology of the floodway is different from the margins of a 1% floodplain (base flood elevation).

The FEMA definition for a floodway is:

> *A "Regulatory Floodway" means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a*

> *designated height. Communities must regulate development in these floodways to ensure that there are no increases in upstream flood elevations. For streams and other watercourses where FEMA has provided Base Flood Elevations (BFEs), but no floodway has been designated, the community must review floodplain development on a case-by-case basis to ensure that increases in water surface elevations do not occur, or identify the need to adopt a floodway if adequate information is available.*

The floodway is an area where the floodwater must continue to drain, there cannot be any ineffective flow flood storage in this area without impacting upstream flood elevations. Additionally, the ground elevations cannot be raised in these areas, especially with the low slope of the Snoqualmie River Valley that is approximately 0.1% to the north.

Any rise in the surface elevation of the floodway or floodway fringe can create a backwatering effect that can induce ineffective flow flood storage causing a rise in the upstream flood waters or can divert the flow from a northerly direction through deflection which can cause erosion or even eddies that can increase flood induced damage.

Any changes to the hydrology or geomorphology of the floodway and even the deeper areas of the flood fringe can cause adverse effects that can often be unpredictable. This is why the NMFS restricted any activities in the floodway in their biological opinion to the FEMA.

The opinion (also called the BiOp) is entitled: *Endangered Species Act Section 7 Formal Consultation and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation for the on-going National Flood Insurance Program carried out in the Puget Sound area in Washington State. HUC 17110020 Puget Sound*. September 22, 2008.

In the introduction, this document states *". . . biological opinion prepared by the National Marine Fisheries Service pursuant to section 7(a)(2) of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.), on the effects of certain on-going elements of the National Flood Insurance Program throughout Puget Sound in Washington State".*

It is also why King and Snohomish County place significant restrictions on any activities conducted in a floodway and even in the floodway fringe areas. Although the floodway and floodway fringe are part of the overall floodplain, these areas are not regulated the same as the base flood elevation in the 1% floodplain, where virtually all of the water becomes ineffective flow flood storage.

The locations of the NRCS previous projects in this area and the proposed WRP are shown to be mostly located in the floodway of the Snoqualmie River (Figure 3). This is also the area where the Snoqualmie River meanders from the east side of the River Valley to the West side, making the hydrology of this area even more complex.

As can be seen on Figure 3, there is no base flood elevation shown for the 100 year (1%) storm event because there is insufficient room on the valley floor in this area for this floodplain to be created.

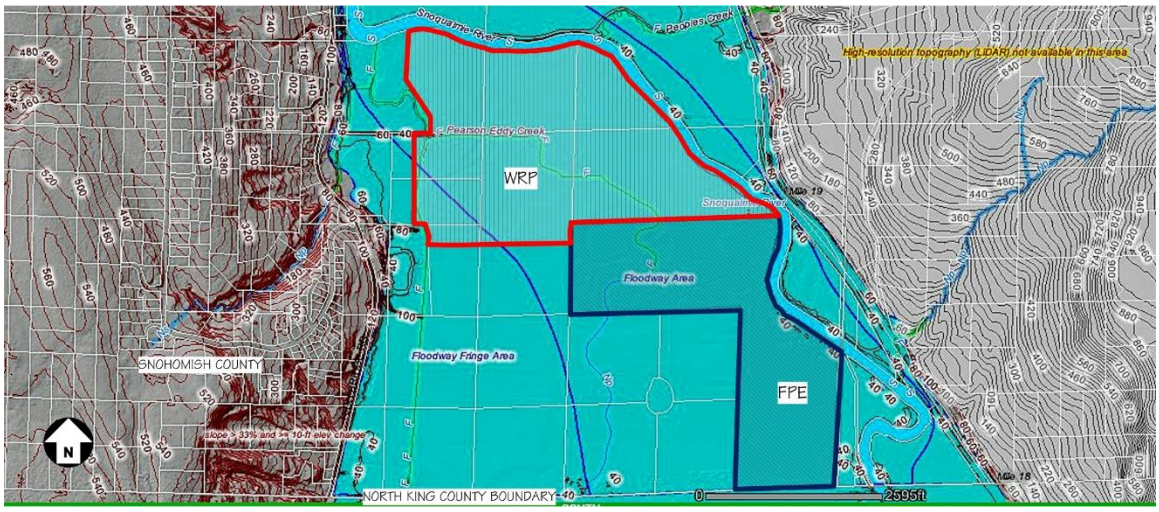


Figure 3 - Locations of the FPE existing NRCS projects and Propose WRP Project on a Snohomish County GIS Floodplain Map, Snohomish County, 2017

The floodway and floodway fringe are areas where the flood water is supposed to still be moving downstream, there should be no ineffective flow flood storage in these areas, which will be found in the floodplain outside of the floodway fringe area.

Any obstacles in the floodway or floodway fringe area can affect the characteristics of the drainage of this area and can raise flood levels. This is why many municipalities and the FEMA can require compensatory storage in any areas within the base flood elevation to prevent flood rise if there is any features allowed in the floodplain within the base flood elevation.

Regardless, SNR's research, which includes the review of the surveyor notes for the 1871 Land Office survey, indicates that most of the "restoration area" was a cranberry marsh that was "impenetrable". Any trees noted were described as dwarf, with Sitka spruce, western red cedar, red alder, and occasional maples in the sections to the west.

The understory was mostly described as devils club, fern, hard hack, and cranberries. The Pearson Eddy slough did not exist in 1871, with only one stream passing through Section 36 of T27N, R06E, WM and through the northeastern quarter of Section 35 and the southeastern quarter of Section 26 where the stream mouth formed a confluence with the Snoqualmie River.

This stream enters and exits a pond that is at the intersection of northwest corner of Section 36, the northeast corner of Section 35, the southwest corner of Section 25, and the southeast corner of Section 26 (Figure 4).

The marsh in Sections 35 and 36 in T27N R06E, WM originates in the southern portion of the marsh in Section 1 of T26N, R06E, WM. This marsh covers most of the western floodway and flood fringe area of the eastern portion of T26N, R06E, WM.

Pearson Eddy Creek did not exist at this time, nor, as stated above did the Pearson Eddy slough. The Land Office survey notes suggest that the water in this marsh system was approximately 1 foot deep.

The notes do not discuss any fish being observed and did not describe the wildlife. However, it is clear that the entire western floodway of the Snoqualmie River Valley was marsh, except for portions of Section 1 of T26N,R06E, WM.

Cranberry marshes do not typically provide a habitat for most fish species due to the relatively shallow depth and based on the description of being impenetrable suggests that there would not be easy passage for any fish that might make it into the marsh. SNR believes that the stream shown on the Land Office maps ceased to exist when agricultural drainage systems were installed.

Considering the NRCS activities are supposed to be a wetland restoration, it is unclear why these activities do not include creating the only documented historic habitat of the area, which is a cranberry marsh. The survey notes were pretty clear that the few trees observed in the marsh areas were "dwarf" and consisted of mostly Sitka spruce, western red cedar, occasional hemlock, and some red alder. The understory was cranberries, devils club, ferns, and hard hack.

It is unclear why the restoration does not focus on the native plants and site conditions that are documented on the survey notes of the Land Office surveyors. There were not many trees and those that were present were "dwarf"", which means that the floodway would not be obstructed by any trees and the herbaceous understory would be flattened during a flood event.

Instead, the NRCS planned these restoration activities prior to 2013 (all of them in this area, including the currently proposed restoration), because it started the permitting process for all of these "restoration projects" in Snohomish County in 2013.

It is unclear why the NEPA process was not commenced before permitting was conducted or why an EA was not prepared for the "restorations" that have already been completed. It is also unclear why SEPA was not triggered in 2013 when the permits to conduct work in a floodway were applied for.

It is unclear how planting trees plantation style in the FPE "restoration project" including many trees that are not listed as being observed by any of the Land Office surveyors in their notes. It is also unclear how the trees were selected as well as the understory, considering what appear to be aspen trees are dominating this tree plantation and are shading out the slower growing trees and the understory. The western red cedar may survive the shading out by these deciduous aspen that are now about 30 feet tall.

However, it is unclear how an aspen forest relates to a restoration of the habitat that existed historically, which was that of marshes; with the dominant plant being the cranberry which is generally a "vine" that does not get much more than a foot tall. The deciduous trees that are at least 30 feet high (since this is private property the tree cannot be examined more closely, but aspen are reported to be among the trees planted.) and if they are aspen or related to aspen will grow to 80 feet high.

It is unclear how a tree plantation with deciduous trees that are already 30 feet high and will be approximately 80 feet high is a restoration to the habitat that existed prior to human activities in this area, especially when the historic habitat is well documented in the Land Office surveyor notes as being marshland with approximately one foot of water with the dominant vegetation being cranberry plants.

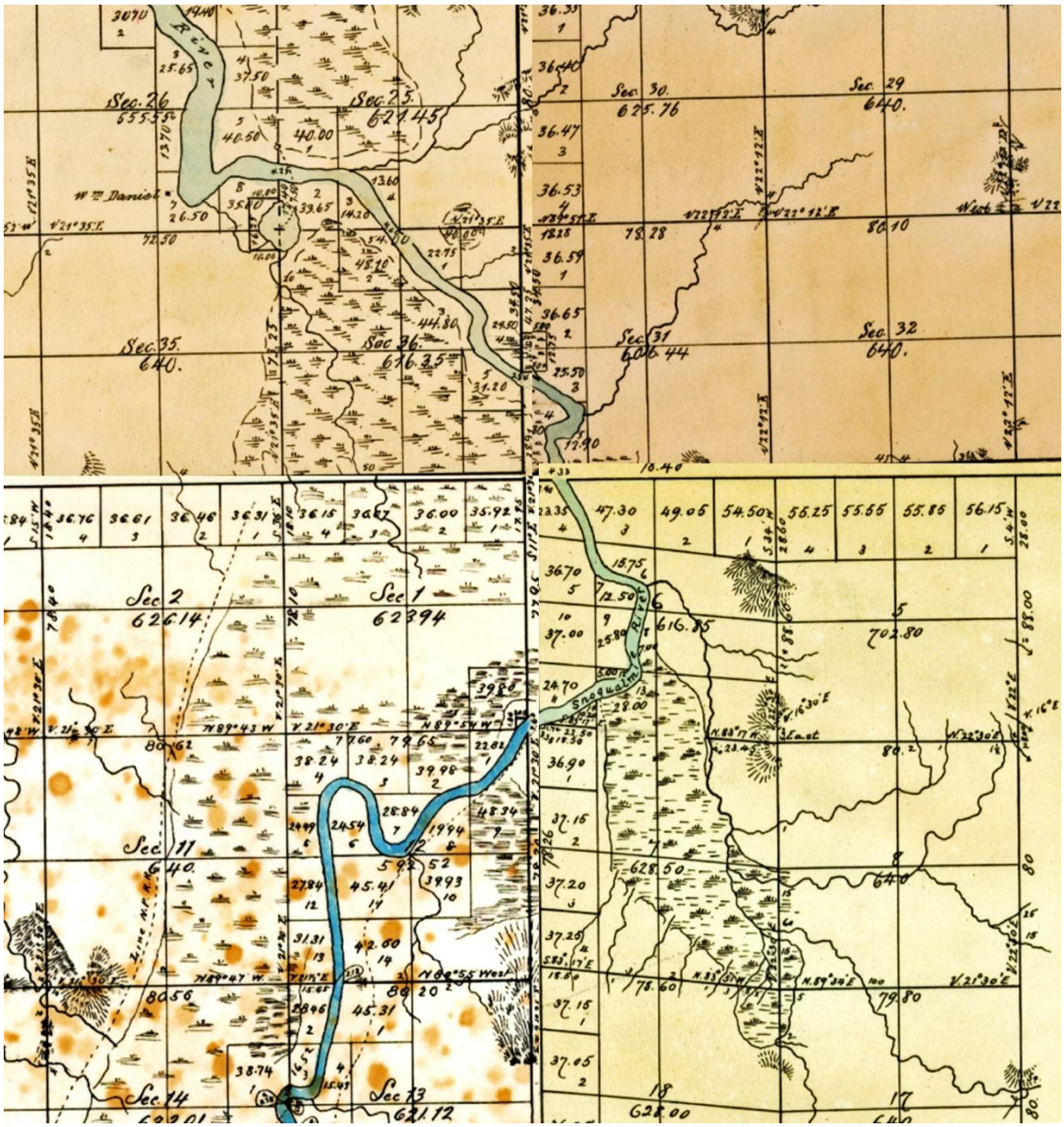


Figure 4 - Composite of Land Office Maps, with the restoration area being in the upper left map, T27N, R06E, SEC 25, 35, and 36, WM

It is unclear what made this marshland impenetrable because this is not discussed in the Land Office surveyor notes, however, an abundance of devils club (which is noted in the surveyors notes) can act as a deterrent to encroachment, especially if the survey team did not have the tools necessary to clear a path through a dense stand.

These plants have thousands of very sharp spines which may account for its scientific name, *Oplopanax horridus.* Penetrating a dense stand of devils club without the appropriate tools (such as a bulldozer) can be very difficult.

It is unclear what the source of the marsh hydrology was because the hydrology no longer exists, however, part of the proposed project to alter the permitted point source MS4 storm water conveyances, the manmade agricultural drainage ditches, the Pearson Eddy Slough and Person Eddy Creek (with permitted point source MS4 storm water as a head water) is to "create wetland hydrology".

However, none of the NRCS studies included hydrogeologic, geologic, fluvial geomorphologic or, obviously surface water hydrology studies (because if they did they would know these features are permitted point source MS4 storm water conveyances and have been since 2007 when King County and Snohomish County were issued Phase I Municipal Storm water NPDES permits).

The problem is that the NRCS does not possess a municipal storm water NPDES permit so it cannot take possession of or alter the permitted point source MS4 system that is covered by the Snohomish County Phase I Municipal Storm water NPDES permit and per this permit, this storm water can have only one destination, the permitted outfall to receiving waters (navigable waters of the United States and/or waters of the State), unless the storm water is diverted into a certified storm water infiltration facility that does not directly discharge to a ground water aquifer.

The construction of the "tree plantation" that is dominantly aspen trees which are in the same genus as poplar trees (the scientific name for the aspen tree is *Populus tremuloides*, the scientific name for a poplar tree is *Populus*) is not a restoration of a cranberry marsh.

Also, it is unclear why aspen were planted due to the dismal failure of poplar plantations planted throughout the Snoqualmie River Valley for use in pulp mills, but there was no market for the poplar "tree farms" when the trees matured, which meant that they were not harvested within the 10 year regulatory requirements.

As these trees continued to grow they intensified flood damage due to the dense planting of these 70 – 80 foot high trees. Almost all of these trees have been removed in one way or the other (cut, windthrown, removed by flood waters), however a few stands still remain and these stands still intensify flood damage in the areas where these stands remain.

It is also unclear why the NRCS is proposing another "restoration project" that is more ambitious than the existing "restoration" considering the existing restoration is dramatically impacting the surface water hydrology of the area which effects the environmental element and the human element.

This includes ongoing water trespass onto prime farmland in the farmland preservation program because the "restoration" reversed the drainage in this area of the Snoqualmie River floodway; the surface water should drain north, but it is now draining south.

The NRCS ignores the failure of their existing restoration and wants to create more damaging cumulative effects, perhaps believing that their determination of no significant impacts will be more accurate this time, despite their insistence that there would be no detrimental impacts from the existing restoration and the NRCS was and is wrong.

However, instead of creating more cumulative effects environmental and human element impacts in this area of the Snoqualmie River floodway and illegally conducting activities on a permitted point source MS4 conveyance system.

Perhaps the NRCS should use the money allocated for a project it cannot conduct without violating 33 U.S.C. 1251 et seq (the federal Water Quality Act of 1987, AKA the "Clean Water Act" and RCW 90.48 of the Washington State laws, the NRCS could use the money to fix the problems their existing "restoration" project has caused to the environmental and human element.

It is clear that the NRCS neglected to conduct the necessary studies before they decided to conduct these projects sometime before 2013, because they applied for the required permits from Snohomish County to construct the existing and proposed project the EA pertains to with no attempt to notify the public whatsoever.

This has led to a violation of Title 7 CFR, Subtitle B, Chapter VI,, Subchapter F,, Part 650; the NEPA regulations for the NRCS. In fact no notice was provided to the upstream county, where the permitted point source MS4 storm water conveyances that are "handed off" to Snohomish County (which also has a Phase I Municipal Storm water NPDES permit, originate and where the ongoing water trespass from the NRCS restoration is impacting.

Considering it that the easements the NRCS enter into are secretive (with taxpayer's money) and the land remains private property, it is impossible to conduct studies in the restoration to determine why the drainage in the Snoqualmie River western floodway has been impacted. However, it is possible that the activities affected the permitted point source MS4 storm water conveyance known as Pearson Eddy Creek, which would be a violation of 33 U.S.C. 1251 et seq and divisions of the federal Department of Agriculture are not supposed to violate federal codes, especially the "Clean Water Act".

Regardless, until the major environmental and human element impacts that resulted from the existing "enhancement" and totally independent, multidisciplinary, studies are conducted on the existing "restoration" project, and it is determined what went wrong and how to fix it (and fix it) the NRCS should not be allowed to conduct the proposed project due to cumulative effects.

The project should also not proceed because the NRCS does not possess a municipal storm water NPDES permit to allow it to manage permitted point source MS4 storm water and this is the primary element of the proposed project, presumably using the permitted point source MS4 storm water to try to create wetland hydrology, even though this is not only illegal, it will not create wetland hydrology per page 44(b) of the Corps of Engineers Wetlands Delineation Manual.

In its EA the NRCS claims their actions have reduced upstream flooding and that their proposed actions will further reduce upstream flooding despite the fact that the NRCS knows that the existing completed projects are causing upstream flooding on prime farmland in the farmland preservation program.

The NRCS's plans include introducing endangered and threatened fish species into a permitted point source MS4 system, which will most likely violate the endangered species act (16 U.S.C. §1531 et seq. (1973)) and it is unlikely that any consultation with the NOAA NMFS will allow the NRCS to introduce threatened and endangered salmonids into a permitted point source MS4 conveyance system.

Additionally, there is no evidence that any salmonids or other river fish occupied the area where the NRCS wants to enhance a fish habitat. This is similar to their previous "enhancement(s)" adjoining this proposed project, to the south where the tree plantation is developing into a monoculture of non-native trees (aspen) in an area that was in 1871 a "cranberry marsh" according to the Land Office surveyor, who indicates that the water is about a foot deep.

It is bad enough to remove prime farmland in the historic agricultural area of the Snoqualmie Valley, which supported the Carnation condensed milk company. This required a specific type of milk cow which is why the Carnation farms was created near the historic city of Tolt, Washington, which was later renamed, Carnation, Washington. At one time virtually all of the agricultural land in the valley was used as pastureland for milk cows that were developed at the Carnation Farm; providing milk for condensed and evaporated milk, which was processed in Monroe, Washington.

However, to call the activities conducted by the NRCS in this area of Snohomish County a restoration or enhancement clearly suggests that the NRCS does not know what a restoration is and does not have a clear understanding of what enhancing prime farmland really is.

These activities convert private farmland into unproductive land that has no value for the property owner because nothing can be done with the land to generate revenues. It does not benefit the citizens of the Valley because this private property is not accessible to anyone and in reality, based on the existing project, the NRCS's activities have caused dramatic harm to the Valley's farmers by impacting the surface water hydrology so that surface water now runs south rather than to the north as it always has.

This water trespass onto the upstream farmland impacts the human element as well as the environmental element, flooding farmland and removing a source of surface water for the lands that have received this surface water historically. Additionally, the monoculture habitat and the upstream flooding have only attracted on wildlife species that was present already, but in manageable numbers; ducks. Instead of the usual flocks of ducks that may number in the 100s, there are now thousands of ducks that decimate pasture land and agricultural crops.

By attracting only one species in huge numbers, the NRCS has put the last dairy farmer in this area of the valley out of business. Additionally, large quantities of ducks lead to water pollution and eutrophication of ponds and lakes by adding extremely high amounts of phosphorous, nitrogen compounds, and fecal coliform. The NRCS should have anticipated adverse impacts on the surrounding agricultural lands, including agricultural land in the farmland preservation program (as the dairy was and the Van Ness farm located immediately south of the completed project).

Based on the problems associated with the existing completed project, which the NRCS refuses to fix, despite the fact that it can be sued for the damages it is causing to upstream farms (ongoing water trespass) and it could be liable for violations of the Clean Water Act which can include fines of up to $37,500 per day per violation, it is clear that the cumulative effects of another failed project would be devastating to the human element and upset the balance of wildlife in the Valley, creating a monoculture of species in the areas where prime farmland was converted into tree farms with a non-native tree being the dominant species (aspen) and impacts to surface water and eventually, to floodwaters when the next significant flood occurs.

There has never been any naturally occurring area in this part of the Snoqualmie River Valley that has had plantation style trees that can grow to 80 feet high very rapidly (they are already approximately 30 feet high) nor has the surface water ever flowed south based on historic data, the geology of the Valley, the overall hydrology of the valley, and the geomorphology of the valley. A restoration would have meant creating a marsh that would be populated with cranberry plants and include stunted versions of western red cedar, spruce, hemlock, and alder with an understory that also includes ferns, hard hack, and devils club.

The problem is that no human activity can duplicate what nature creates and recreating the hydrology that existed in 1871 cannot be duplicated by human activities and in most cases when humans try to duplicate what nature creates, unintended, detrimental consequences arise, as is the case with the existing NRCS project(s), which did not even attempt to duplicate pre-existing natural conditions; instead it created a "new" manmade feature not found anywhere else in the natural areas of the Snoqualmie Valley and did not exist historically, at least in 1871.

When an existing project(s) demonstrates that actions conducted are detrimental to the human and environmental element, it is unclear why the NRCS believes more adverse cumulative effects would be beneficial at restoring this area of the Snoqualmie River Valley to "natural, pre-existing conditions". This is especially the case when in reality the proposed actions to be conducted by the NRCS will not even attempt to duplicate the historic conditions that existed in this area of the valley; at least as they were in 1871.

Additionally, BECAUSE the NRCS did not conduct comprehensive, multidisciplinary scientific studies, it did not bother mapping the sources of the hydrology in this area of the Snoqualmie River floodway and floodway fringe. Instead of using pure science, the NRCS made presumptions, and it ignored the fact that the geomorphology and hydrology of the Valley has changed significantly since 1871. These changes began in the 1880s and really ramped up after 1895 when the Drainage District Act of 1895 was promulgated by the Washington State legislature (and the revised act that created drainage and diking districts in 1905.

This led to major changes in the surface water hydrology of the River Valley and the creation of extensive drainage systems that included natural drainage features in their design where possible. In fact one of the most aggressive and comprehensive drainage efforts began in the 1960s and was led by the Soil Conservation Service (the NRCS's predecessor). This included the installation of extensive subsurface drainage systems (tile lines), extensive drainage ditch systems, and even the construction and maintenance of levee systems. This means that much, if not all of the surface water hydrology found in the farmlands on the valley floor is artificially created.

This was essential to agriculture and this is what the Valley is famous for, the agricultural heritage that includes the Carnation Company, and other elements of the agricultural history of this Valley, which is now evolving into a new niche market of growing produce "naturally" to meet organic standards to meet a growing demand for organically grown produce in the surrounding municipalities, especially the Cities of Seattle and Bellevue.

However, these areas must be carefully chosen and the soils must be tested to insure that there are no potential contaminants present, because some agricultural areas of the valley fell prey to the allure created by the Publically Owned Treatment Works (sewer treatment plants – POTWS) that were being constructed in the 1960s to address water quality issues with dumping raw sewage into the waters of the State and Navigable Waters of the United States.

The treatment plants generate sludge during the treatment process and they had to find a way to get rid of the sludge, so the renamed this sludge to "biosolids" and offered it for free to farms throughout the Puget Lowlands as a replacement for fertilizer that would otherwise have to be purchased. The USEPA even jumped on board and supported the use of biosolids, which made farmers more amenable to try this to save money and to "recycle" a waste product.

However, those farms that used the biosolids cannot be certified for organic produce because what the USEPA and the POTWs did not disclose is that the biosolids contain a myriad of contaminants of concern that are not even required to be tested for in these biosolids. Additionally, there was no full disclosure on the chemical nature of the biosolids and how these might affect the productivity of farmland soils.

Biosolids are sewer treatment plant sludge that is generated from all sewage the plant receives including (as required by federal code) industrial and commercial waste water (these industrial and commercial dischargers were required to obtain POTW permits from the POTW). While the biosolids do contain significant amounts of phosphorous and nitrogen compounds, they also include significant amounts of sodium chloride and sulfur, which are byproducts of the disinfection process. Additionally, the biosolids contain heavy metals, numerous chemicals, and pharmaceuticals, that are below hazardous levels in the biosolid itself, but the cumulative effects of repeated treatments with these waste products is a buildup of the salt and sulfur in the soil and the chemicals and pharmaceuticals.

The buildup of the salt (sodium chloride) and sulfur can impact the productivity of the agricultural fields, with the salt buildup impacting plant growth and the sulfur reducing the soil pH to levels that most agricultural crops do not thrive in. The buildup of heavy metals, chemicals, and pharmaceuticals is not known to impact the crops, but it does make the soil itself toxic to different species of wildlife (somewhat like the use of pesticides in agriculture that included DDT, which began decimating bird populations, including the bald eagle and the use of lead arsenate, which still impacts rice crops to this day, with the rice having elevated levels of arsenic.

Many species of fish, including juvenile salmonids can be affected and even killed if they come in contact with these soils and in waters that are artificially created in these soils as part of a “restoration” effort. The NRCS did not bother conducting environmental screening of the agricultural lands they are proposing to introduce wildlife into including threatened and endangered species fish. It is unclear why there was no environmental screening of these soils to determine if the was a buildup of pesticides, herbicides, or “byproducts” of biosolids in these soils that could be dangerous to wildlife and salmonids.

It is odd that the “organic farmers” in the valley must test their soils to demonstrate that there are no pesticides, herbicides, or other “byproducts” of historical agricultural activities so they can certify that their produce is organic and the NRCS is creating a “habitat” for wildlife and fish, that will include threatened and endangered species and did not conduct any environmental screening of the soils. It is difficult to un-ring a bell and once these soils are impacted with any contaminants of concern that could be harmful to fish or wildlife, the only use for these area is to maintain the agricultural operations with crops that will not sequester these COCs in the plant.

However, the NRCS did not conduct other environmental studies including testing the water quality of the surface water features it incorporates into its “restorations” nor did they bother tracing these surface water features to their headwaters and conduct full stream reconnaissance studies. Had they done so, they would have discovered that virtually all of the surface water in the area where these projects have and are proposed to be conducted is permitted point source MS4 storm water as of 2007 when Ecology issued the first state wide municipal storm water NPDES permits, pursuant to Section 402 of the Clean Water Act. However, storm water began being regulated as waste water when the Water Quality Act of 1987 was promulgated to revise the Water Pollution Control Act of 1972.

It is apparent that the NRCS is so agenda driven that they neglect conducting the necessary detailed, multidisciplinary, independently peer reviewed, scientific feasibility studies. This is what NEPA is meant to address, the impacts caused by myopic reviews that do not focus on the actual science and the potential impacts they project will have on the environment or on the human element and in this case on the regulatory status of the surface water features that the NRCS assumed were "natural streams" even though none of the current water features are observed in the 1871 Land Office maps (nor are the marshes shown to be present on these maps).

The surface water features in the area of the existing completed project and in the proposed project area are not naturally created streams, they are manmade drainage systems that include segments of relict drainage channels. However, storm water systems were created throughout the developed areas of the Valley and on the western and eastern ridges of this river valley (horsts). This includes storm water collection systems for impervious surfaces such as roads, which are considered to be pollution generating surfaces.

There is extensive development on the western plateau area of the Snoqualmie River valley and extensive impervious surfaces including paved roads. This means there is also an extensive storm water collection system built by King County.

It is rare for storm water to not be conveyed by gravity and the closest and easiest route to drain the storm water collected on this western plateau is down the slope of the western plateau, where King County often uses relict glacial meltwater channels to divert this storm water into to convey it to the Valley floor towards the "receiving waters" which are the Snoqualmie River. Additionally, the storm water that is generated on West Snoqualmie Valley Road NE Duvall, Washington is collected and discharged into the manmade agricultural drainage ditch system, which is a common practice for King and Snohomish County.

Most of the storm water conveyance systems were built before 1987 so the only conflict would have been an ongoing water trespass with the County diverting its storm water into a private agricultural drainage system. However, after 1987, a major regulatory problem was created and even though the first revision of the 1972 Water Pollution Control Act; the Clean Water Act of 1977, Section 502 exempted agricultural drainage ditches from being point sources (and agricultural irrigation return flows), once permitted point source MS4 storm water is diverted into these drainage ditches, the exemption ceases to exist and these agricultural drainage ditches become part of the permitted municipality's point source MS4 system (King County's first NPDES permit was issued in 1996 as a joint County permit).

As of 2007, when the actual NPDES permits were issued, this storm water must be regulated as permitted point source MS4 storm water and only permitted municipalities can manage this storm water (permittees, co-permittees, and entities including in the notice of intent to be permitted – NOI). Because Snohomish County possesses the same municipal NPDES permit that King County possesses, King County can "hand off" its permitted point source MS4 storm water to Snohomish County, who then becomes responsible for this MS4 storm water to its permitted outfall to the Snoqualmie River.

It should be noted that Snohomish County also discharges permitted point source MS4 storm water into these manmade agricultural drainage systems and that only Snohomish County has the necessary permit to allow it to convey the permitted point source MS4 storm water to the permitted outfall. The NRCS does not possess a municipal storm water NPDES permit which means that even if Snohomish County wanted to, it could not hand off the storm water to the NRCS.

However, as previously discussed, a point source conveyance system is required to be designed to convey point source water to the permitted discharge point to the receiving waters (this is what the permit calls the Navigable Waters of the United States and Waters of the State).

The only other option under the Clean Water Act is to infiltrate the point source storm water to ground water via a certified storm water infiltration facility, with the certification indicating that there is NO DIRECT discharge to a ground water aquifer (drinking water aquifer).

The NRCS proposed actions for their proposed project is to fill in the permitted point source MS4 storm water conveyance system and relocate it so that it discharges in to a pond that drains into the main permitted point source MS4 conveyance system, the manmade Pearson Eddy Slough (which did not exist in 1871). The NRCS wants to use tide gates to allow fish passage into the permitted point source MS4 system, however, pursuant to Section 502 of the Clean Water Act, point source are considered to be polluted because their intended purpose is to only convey polluted storm water, which is regulated that same as waste water.

Point source water is not waters of the State or United States (see Scalia in Rapanos v the United States, SCOTUS, 2006) and it is highly unlikely that the NMFS will condone introducing threatened and endangered species into a permitted, point source MS4 system. Additionally, wetland hydrology MUST be "Navigable Waters of the United States or State and point sources do not meet this criteria. This includes artificially created wetlands for restoration purposes, although storm water treatment facilities can be designed to mimic wetlands.

The NRCS did not conduct an adequate level of multidisciplinary scientific studies that were independently peer reviewed before they decided to proceed with this project, especially in the light that their existing "restoration" that bounds the proposed project has create major problems to the environmental and human element and the NRCS refuses to fix these problems. Now they want to repeat their mistakes and create even worse cumulative effects.

However, due to regulatory constraints of the Clean Water Act and the Endangered Species Act, technically the NRCS cannot move ahead with their project as planned anyway and the use of point source MS4 storm water for anything other than conveying it to its permitted discharge point is prohibited, unless Snohomish County decides to install a water quality treatment system, which still means that the water is a point source and the only way a point source can cease being a point source is when it is discharged into receiving waters or infiltrated to ground water.

The problem with agenda driven programs is that details are ignored and assumptions are made without consideration of the potential problems and impacts from these problems can have on the environment and the human element.

It is unclear what is driving this agenda, but it is clear that shortcuts are being taken, the public was not informed of these agenda driven programs when they were funded, and the NRCS proceeded with even obtaining permits in 2013 from Snohomish County without notifying the public of the scope of their plans and what the potential impacts would be created from these projects that were unstoppable as far as the NRCS was concerned.

As discussed in the second part of these comments, the NRCS ignored its own NEPA code on the first project and even on the proposed project because they waited four years after they had decided the projects would go through regardless to produce an EA that does not include any level of basic studies that would be required when determining the feasibility of the projects.

It is clear that the proposed project is infeasible because its implementation would violate federal and state codes. It is also clear that the reason the existing project has created impacts to the environment and the human element because there was no feasibility studies that included the studies necessary to determine if the project was feasible and to consider all potential adverse impacts from the project.

This is because the required multidisciplinary scientific studies were not conducted and were not independently peer reviewed and it is clear that the NRCS is unfamiliar with other federal codes such as 33 U.S.C § 1251 et seq. and state codes such as RCW 90.48. The NRCS did not even retain the services of a geologic consulting firm to conduct stream reconnaissance studies to determine if the features in the project area were actually streams, which should have been done considering the surface water hydrology present today is not even similar to the surface water hydrology of 1871.

Considering the NRCS evolved from the Soil Conservation Service which was extremely proactive in helping agriculture by helping with agricultural drainage, the NRCS should be very familiar with the drainage systems that were installed on agricultural lands. It is unclear how a subsidiary of the Department of Agriculture does not realize how dramatically the surface water hydrology of agricultural land has been altered by human activity and that some of these alterations can have unintended detrimental effects to the environment and the human element.

This problem arises when a very simple question is not asked, should we do this even though there is a good potential for unintended adverse consequences and it is extremely unlikely that any human activities designed by humans will have any of the functions or even resemble what nature creates? It is clear that the existing project that is impacting the environment and human element, does not resemble anything in nature and does not even have dominant native vegetation. It is obviously not a restoration, because if it were, the NRCS would have tried to create a cranberry marsh with one foot of water.

What the NRCS did was take valuable, heritage agricultural land out of production forever and has created a monoculture aspen stand that is not much different from the poplar plantations that populated the valley floor until the impacts of these plantations were realized during flood events. However, these poplar plantations had a timeline where they must be removed within 10 years, the NRCS completed project has no such limitations yet it is basically no different from the poplar plantations (aspen is a species of poplar).

Did the NRCS conduct a cost/benefit analysis before committing to these projects? What incentives do the private property owners have to conduct maintenance and to fix the surface water hydrology problems caused by this project? What was once money producing prime agricultural land is now useless and it only generates costs with no revenues.

This may work in government, but in the private sector, it does not and the land owner will not pay any money to do anything on land that is not generating revenues and never will. What will most likely happen is that the land owner will simply stop paying property taxes on the land and in three years the County will most likely take the land for nonpayment of property taxes.

However, the County usually sells land taken for nonpayment of taxes, but in this case since the land only has liabilities and no potential for any revenue generation, it is unlikely that any private citizen would purchase the land, which means Snohomish County gets stuck with the land and the liabilities.

However, the NRCS does not care, their job is done and NRCS assumes no responsibility for the "success" of the project or the problems that it creates, handing these issues back to the property owner. This is a major flaw of this program that is agenda driven with no foresight into the ultimate outcome of the project and the taxpayer money that was wasted at the whim of government entities that obviously do not know what they are doing and could care less about the adverse impacts of their actions.

The NRCS does not even know what went wrong with their existing project(s) and has conducted no studies to find out. Without knowing what went wrong, how will the NRCS avoid repeating the same mistakes on the proposed project? This then adds cumulative effects to a project that is already heavily impacting upstream agricultural land in an agricultural protection area, where the only allowed use of the land is agricultural activities under the King County agricultural protection program.

The area where the NRCS constructed its existing project and proposes to construct another project adjacent to the existing project(s) is in a flood control district, because as shown on the cover of this letter, the Snoqualmie River is capable of MAJOR flood events that are significant enough to flood SR 203 to the north and south of the City of Duvall.

It is incredulous that the NRCS believes that approximately 150 acres of plantation style aspen grove that covers half of the western floodplain of the Snoqualmie River will not increase the intensity of flooding. It is a known fact that the historic poplar plantations that covered the valley floor increased the flood damage significantly. The NRCS relies of models that are not designed to factor in plantation style 80 foot high aspen groves in a floodway, where dormant farmland was present during the time of year that the major floods occur.

As can be seen on Figure 5, the floodway area was generally clear except for the Heckman hunting club property with Round Lake. However, the beginning of the Wetland Mitigation Bank that illegally diverted permitted point source MS4 storm water has already begun, the very year that this storm water became permitted because that is when King County and Snohomish County were issued their Phase I Municipal Storm water NPDES permits (that became effective January 2007).

In 2007 there were no major obstructions in this area of western floodway of the Snoqualmie River, which allowed river floodwaters to continue to flow to the north, which is the natural drainage direction (the Snoqualmie River is not tidally influenced, although the Snohomish River is). It should be noted that although not shown in Figure 5, Pearson Eddy Creek is also a permitted point source MS4 conveyance. Its headwaters are point source storm water from King County's permitted point source MS4 system.

It should be noted that there was no public notice and no SEPA EA for the NRCS project that is now completed as shown in Figure 6. The entire western floodway for the Snoqualmie River is now impacted with cumulative effects, the problematic NRCS FPE project and the private "wetland mitigation bank" that is illegally diverting permitted point source MS4 storm water into a private detention facility that covers approximately 220 acres. This creates an impervious surface that is populated with dense vegetation.

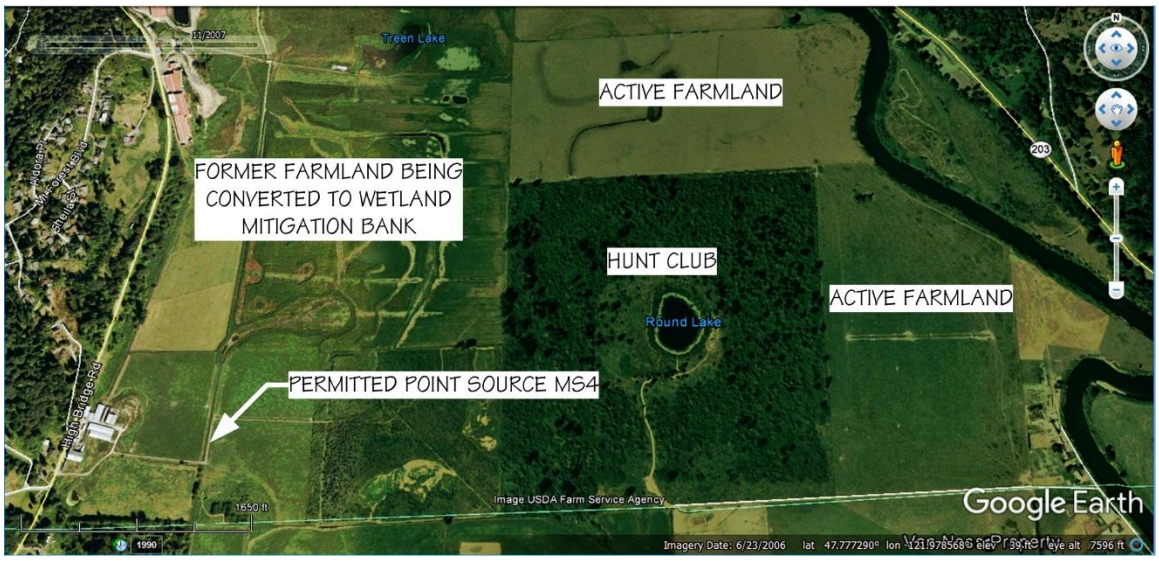


Figure 5 - November 2007 Air Photograph of the Snoqualmie River floodway prior to NRCS activities, Google Earth Professional, 2017

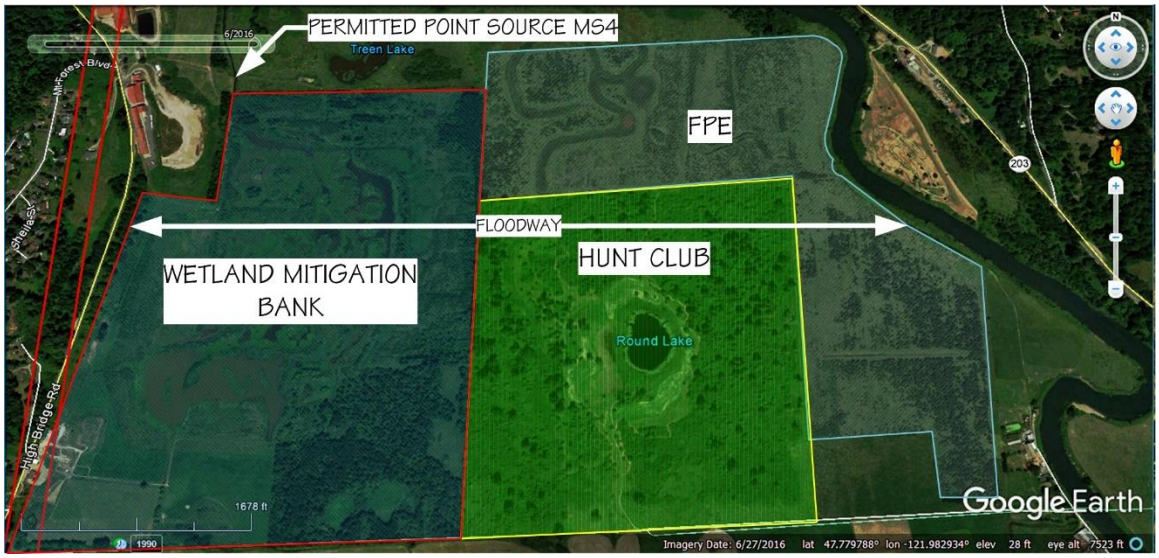


Figure 6 - June 2016 Air Photograph showing the changes to the western floodway of the Snoqualmie River, Google Earth Professional, 2017

Figure 7 suggests a drainage blockage is occurring at the northern boundary of the FPE, the NRCS completed project. There are serious known drainage issues with this completed project, with surface water now draining south rather than to the north, which is the normal direction of drainage for all surface water in the Valley.

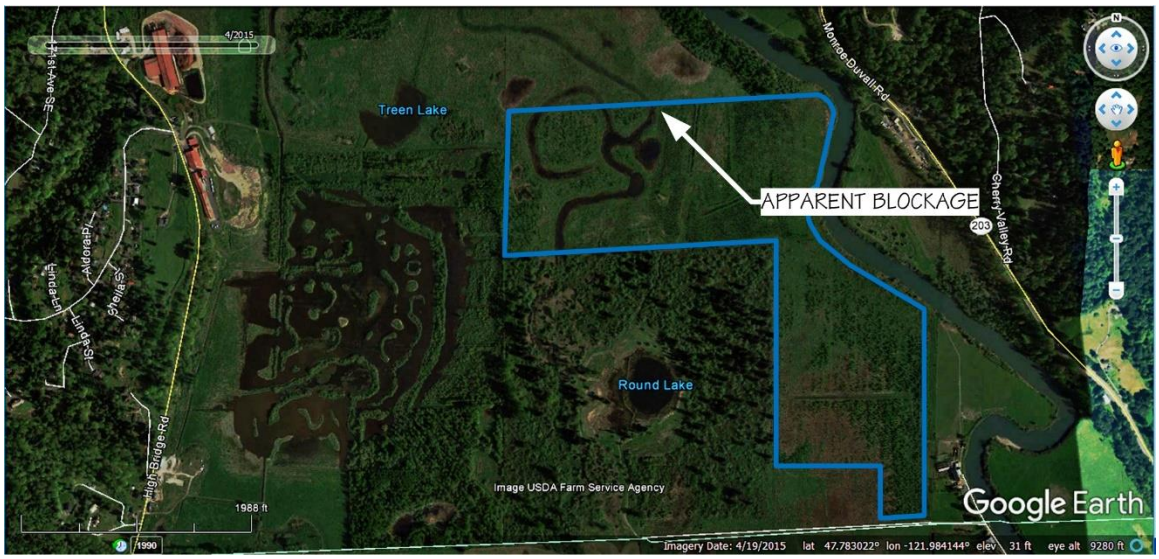


Figure 7 - April 2015 air photograph suggesting a drainage blockage at the northern edge of the FPE, Google Earth Professional, 2017

Considering there is no evidence of ANY multidisciplinary scientific studies not only of the project areas, but of the area providing the hydrology to these project areas that is independently peer reviewed, it is unclear how the NRCS could have even determined if the projects are feasible or not.

Additionally, there should have been detailed hydrogeologic and geologic studies conducted in the project areas to determine if any at or near surface unconfined ground water aquifers are present, considering there would need to be a source of wetland hydrology available to "create" wetlands for the Pearson Eddy Slough proposed project.

Although it is clear that an impenetrable cranberry marsh was present in this area based on the Land Office surveyor notes, this was also the case for "FPE" area, which was not restored as a cranberry marsh that was what was present in this area in 1871.

The surveyor notes on the vegetation of this area is very clear that there were not any major stands of trees, especially aspen trees, which are never mentioned anywhere in the survey notes. These notes describe dwarf scattered trees that only included a few native varieties, including spruce (assumed to be Sitka spruce), cedar (assumed to be western red cedar), hemlock (assumed to be western hemlock), and alder (assumed to be red alder).

It is unclear how planting trees and understory plantation style (in rows) is a restoration or even an enhancement, considering the NRCS created something that is not naturally found in the Snoqualmie River floodways.

However, they did create something very similar to the poplar plantations planted by speculators who were planning on these poplars to be used in pulp mills that used to be present throughout the floodway. As previously discussed, the maximum time allowed for these poplars to remain unharvested was 10 years. However, the pulp mill closed and the market for the poplars disappeared and were never harvested, which resulted in severely increased flood damage during river flood events.

The purpose of this completed NRCS project is unclear, however, it is certainly not a habitat enhancement, it is not a restoration, and it put prime farmland permanently out of production. The unintended consequences of upstream flooding were predicted by SNR but for some reason the NRCS refused to accept that this phenomenon would occur, or their agenda did not allow for any interruptions in their clandestine activities that really serve no purpose and are causing a water trespass on upstream farmland and severe damage to this farmland.

Based on discussions with area residents that live in this area and do not conduct spot visits, there has been no increase in wildlife diversity or numbers, except for a dramatic increase in ducks and an increase in beaver activity, which is a pane to agricultural areas. Aspen is one of the beaver's favorite trees, along with willow. Planting trees and shrubs that will attract beaver in an agricultural area is not wise if you do not want to impact the human element and completely change the environmental element. Interestingly, the Land Office surveyor notes do not discuss any beaver activity in this area.

Additionally, beaver activity cannot be allowed in a permitted, point source MS4 conveyance system. The sole purpose of these systems is to convey and if necessary, detain point source storm water. Since point sources are polluted, disbursing over unpolluted areas is not allowed in the general municipal storm water NPDES permit, plus blocking the conveyances can cause upstream flooding which can and does cause damage to private property and potential illegal water trespasses.

What is curious is that the NRCS uses a 1948 air photograph to determine what the natural conditions were in the floodway area. Human settlement in the Snoqualmie River Valley started in the 1850s. This means that almost 100 years of human activities have been conducted in the Valley and it is known that major agricultural drainage projects were conducted in this valley, including the area where the existing project and the propose project is located.

A much more reliable resource is the 1871 Land Office Maps and surveyor notes because there were less manmade changes in 1871 than in 1948. It is unclear why the NRCS did not consult the surveyor field notes taken during the survey, these include descriptions of the area, the vegetation, and the "quality" of the soils and forest.

As previously discussed, and as the NRCS knows, the 1871 Land Office map of the area where the existing and proposed projects are located was a cranberry marsh that extended to the south into Township 26N, R06E, WM.

There are three surface water features shown on the T27N, R06E, Sections 25, 26, 35, and 36, a cranberry marsh, a small stream that that originates in the NEQ of Section 1 of T26N, R06E, WM, and a small pond in the northwest corner of Section 36, which the stream passes through before it forms a confluence with the Snoqualmie River (see Figure 4).

There was NO slough in 1871 based on the mapping conducted by the only official mapping entity in the Oregon and eventually, Washington Territory, the Land Office. This feature is a manmade agricultural drainage ditch as are virtually all drainage features in this area of T27N, R06E, WM. The "swales" described by the NRCS are relict river channels of the Snoqualmie River, which is a meandering river. This means that the river has high sinuosity and the river channel moves back and forth across the river valley floor, becomes disconnected, creating oxbows, and abandons entire channels as it has throughout the river valley and in the area where the NRCS projects are located.

What is unclear is why geologic, hydrogeologic, fluvial geomorphologic, surface water hydrology and other studies conducted prior to 2004 for feasibility studies? Historically, there were cranberry marshes present as of 1871, but today, the USFWS Wetland Inventory Maps only suggest one wetland may be present in the area where the NRCS projects are located, on the Round Lake property owned by the Heckman hunting club (Figure 8).

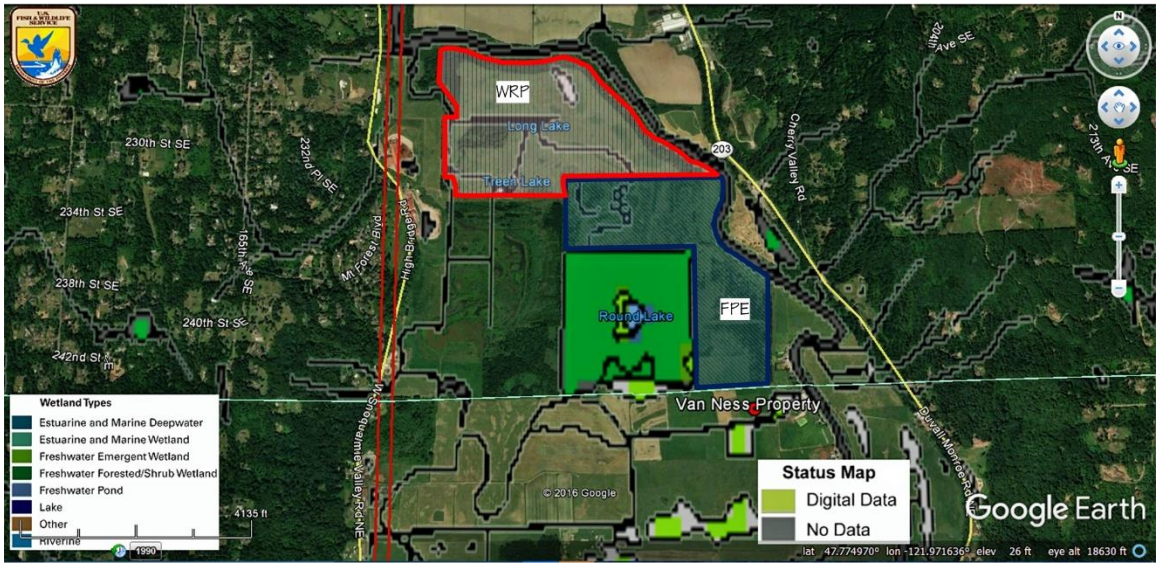


Figure 8 - USFWS Wetland Inventory Map Layer on June 2016, Google Earth Professional image, 2017

The measured depth of the water in the marshes by the Land Office surveyor was 1 foot on August 9, 1871, the land office map of T26N, 06E, WM shows five seasonal streams draining into the marsh from the northern half of Section 14 to the north. There are no streams shown to drain into this marsh in T27N, 06E, WM. It is unclear how the NRCS determined that the floodway of the Snoqualmie River was a historic salmonid habitat, there is no documentation that SNR could find that suggests that ANY fish were present in this shallow marsh that was impenetrable.

The NRCS suggests that manmade ditches are natural habitats for salmonids, when in reality there is no evidence of any fish species being located in this area historically, except during significant flood events. However, floodwaters are ephemeral and not permanent, typically lasting less than one week. The floods occur on average approximately every 5 – 10 years, which does not provide a habitat for any fish species and if anything, fish that were in this area during a flood could be stranded.

SNR does not find any multidisciplinary, peer reviewed scientific studies conducted for these projects prior to the acquisition of the lease in 2004 for feasibility purposes. The only independent peer reviewer of the EA was Ted Sullivan, King County Farmland Preservation Program, who is reviewing the modeling in progress. All other peer reviews were conducted by NRCS staff.

The following is from Appendix D of the EA, the only signed and stamped document SNR reviewed (but was not independently peer reviewed), signed by Lawrence A. Johnson, PE, State Conservation Engineer, February 11, 2016:

"Historically the pumping plants served to accelerate the evacuation of flood water within the study area. There was a pumping facility located at the Gate 1 structure location, and there is a non-operational (unknown if functioning at this time) pump facility located at the Gate 4 structure. Without pertinent pump or motor information it is not possible to model the effect that the pumping facilities would have on the evacuation of water from the study area. It should be anticipated that there would be a positive benefit, however it is not possible to speculate on the reduced number of days that the study area would be inundated.

Surface drainage of the study area could be improved by rehabilitating and maintaining the existing drainage ditch network. Identification of the low areas where water can pond and ensuring that they are hydraulically connected to drainage features would help to remove water from the desired areas throughout the study area.

For example, Gates 2 and 3 provide drainage to the entire FPE easement. ***The modeling demonstrates the importance that the drainage ditches, buried pipeline and flap gates have on the easement****. Currently as modeled,* ***standing water from the drain ditches and the land they serve are ponded and are hydraulically disconnected from the Gate 1 and 4 structures****. Re-establishment of Gates 2 and 3 would allow water from the disconnected area within the FPE to drain from the site. Generally, drainage maintenance and the associated costs are the responsibility of the landowner and not NRCS.*

Pumping plants may provide beneficial accelerated evacuation of water from the study area. Before pursuing the re-establishment or new pumping facilities, it is recommended to model the effects to determine the effectiveness of alternatives. An economic analysis should be completed for the alternatives in order to evaluate the benefits vs. cost. A high operating cost may negate the economic benefits of installing and operating a pump facility.

Re-establishment of the pumping facility that once was located on the WRP easement could be authorized by NRCS through a compatible use agreement. All installation and maintenance costs would be burdened by a local entity/sponsor and ***not NRCS****. The Pumping Plant (see Figure 6) rehabilitation, operation and maintenance cost of would be burdened by a local entity/sponsor and not NRCS."*

It is clear that the "preferred" approach by the NRCS is to not heed Mr. Johnson's advice and the human element of the NEPA requirements is to be ignored. However, the environmental element is skewed because there are zero actual multidisciplinary scientific studies that have been conducted.

Even wetland studies were not conducted and no geologic or hydrogeologic studies were conducted to determine if the hydrology necessary to create the mandatory saturated soil conditions (per the Corps of Engineers Wetlands Delineation Manual, 1987 and the Regional supplement, 2010, which are codified in the Washington Administrative Code and are required to be used in wetland determinations), which per the Glossary in the 1987 manual, page A11 defines saturated soil conditions as:

> *Saturated soil conditions. A condition in which all easily drained voids (pores) between soil particles in the root zone are temporarily or permanently filled with water to the soil surface at pressures greater than atmospheric.*

This is ground water aquifer hydrology, although, in the field of hydrogeology, the pressure would be equal to or greater that atmospheric, because there are two types of ground water aquifers, unconfined and confined.

The only ground water aquifer than can provide wetland hydrology at the ground surface would be an unconfined aquifer and at surface unconfined ground water aquifer are extremely rare in the Puget Lowlands, except in marine shoreline areas; unconfined aquifers are at atmospheric pressure; confined aquifers are at a pressure greater than atmospheric.

Additionally, we must use the definition of a wetland that is found in this case the Shoreline Management Act, Chapter RCW 90.58.030:

> *(h) "Wetlands" means areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in* ***saturated soil conditions****. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands do not include those artificial wetlands intentionally created from nonwetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands may include those artificial wetlands intentionally created from nonwetland areas to mitigate the conversion of wetlands.*

Inundation by surface water to create saturated soil conditions cannot occur in all conditions because wetlands cannot be more than 2 meters deep which provides 1/5 of an atmosphere of pressure and as the definition for saturated soil conditions provided above indicates, the pressure must be greater than atmospheric, this is what page 44(b) of the Corps 1987 manual addresses, where inundation coincides with saturated soil conditions:

> *(b) Analyze hydrologic data. Subject the hydrologic data to appropriate analytical procedures. Either use duration curves or a computer program developed by WES (available from the Environmental Laboratory upon request) for determining the mean sea level elevation representing the upper limits of wetland hydrology. In the latter case, when the site elevation is lower than the mean sea level elevation representing a 5-percent duration of inundation and saturation during the growing season, the area has a hydrologic regime that may occur in wetlands. NOTE: Duration curves do not reflect the period of soil saturation following dewatering.*

Using the Corps guidance documents is mandatory and to identify a wetland all three wetland indicators must be present, this includes saturated soil conditions, which is wetland hydrology. However, the NRCS did not have ANY scientific studies conducted, let alone the NEPA required multidisciplinary, independently peer reviewed, scientific studies that should have been conducted for feasibility analysis before the leases were obtained.

The NRCS's historical analysis of the project areas is flawed and is baseless, there was NO "Pearson Eddy Slough" historically based on the 1871 Land Office Maps there was one small stream in the marsh area that is shown on these maps and the pond that is shown is very possibly a beaver pond. Regardless, the agricultural drainage ditch system, including the manmade "Pearson Eddy Slough" are not natural features and are not natural "streams".

The relict channels in the area are abandoned channels from the Snoqualmie River, not manmade swales. There is an abandoned oxbow in the northern portion of the existing completed project with the plantation style plantings of trees that include non-native species trees that are a rapidly growing species of poplar, the aspen, which attracts beavers into an agricultural area (along with the willow plantings).

Part of NEPA's requirements is that there be no impacts to the human element and that cumulative effects be assessed. But part of NEPA is also determining if a site is suitable for the intended purpose and this requires scientific as well as engineering studies, however, it is the geology, hydrology, fluvial geomorphology, hydrogeology, geomorphology, and biology of the area that must be considered for the environmental impacts and the human element impacts will be derived from these studies also.

The NRCS started this project in 2004, with no public notice, no NEPA EA, with no feasibility studies and before the provisions of section 402 of the Clean Water Act had been implemented in Washington State. However, in January 2007, the municipal storm water NPDES permits were issued, making all municipal storm water permitted point source municipal separate storm sewer system (MS4) storm water, which is strictly regulated.

It would have been wise to at least obtain the permitted MS4 maps from the municipalities to determine what may be permitted point source MS4 storm water and not assume that the point source exemption for agricultural drainage ditches and agricultural irrigation return flows applied to all of the drainage ditches on the Valley floor. However, it would have even been better to have the scientific studies conducted that included stream reconnaissance studies, conducted by licensed geologists and specialty geologists to insure that the surface water features are actually what the NRCS believed them to be.

Data on MS4 storm water maps from King County clearly indicate that permitted point source MS4 storm water is discharged into the manmade agricultural drainage ditch known as Pearson Eddy Slough and SNR's studies on the western plateau area and slopes indicate that permitted point source MS4 storm water is diverted into the relict glacial meltwater channels that drain into Pearson Eddy Slough, a manmade agricultural drainage ditch. These studies also strongly suggest that the headwaters to Pearson Eddy Creek are considered to be permitted point source MS4 storm water regulatorily.

As previously discussed, permitted point source MS4s can only be managed by a permitted municipality and in the case of the proposed project on the Pearson Eddy Slough this would be Snohomish County Public Works. These permitted point source MS4 conveyances cannot be diverted and used for other purposes and are not waters of the State or Navigable Waters of the United States, they are conveyances dedicated to moving polluted storm water to the permitted outfall into the "receiving waters".

The Water Quality Act of 1987 is what changed the regulatory status of storm water to that of wastewater. This Act was in effect when the NRCS purchased the leases in 2004 and Ecology was already working on the municipal storm water NPDES permits at this time.

Regardless as of 1987 point source water was regulated federally and pursuant to Section 502 of the Water Quality Act of 1987 (AKA the Clean Water Act) point sources are considered to be polluted. In fact, technically agricultural drainage would be a point source, if it were not specifically exempted in Section 502; however, this exemption only applies if the water in the drainage ditch system is 100% from agricultural drainage.

Unfortunately, the Counties had been diverting their storm water to these agricultural drainage ditches for decades and once this storm water became regulated, so did the agricultural drainage ditches, as permitted point source MS4 conveyances with King County having the permit for the storm water in these ditches to the south and Snohomish County having the permit for the storm water once it crosses the County line to the north.

The NRCS claims that the farmland is not prime farmland because it is frequently flooded during the growing season, however, this is not backed up with flood data that suggests that this area is frequently flooded during the growing season, which seldom starts earlier than May. Significant floods (sufficient to inundate this farmland) occur every 5 – 10 years and most of these floods do not occur from May to October, which is generally the growing season. The NRCS has taken prime farmland out of production because the lease was effective in 2004 and this is just now being addressed in an EA 13 years later?

This is what happens when a program is agenda driven rather than using science to carefully choose areas that are as close to the natural state as possible, actually have the hydrology necessary for restoration activities, the location and activities will not impact the human element, and the farmland has become fallow and unproductive for some scientific reason that does not include being impacted with biosolids or other materials that can affect the environmental element.

Additionally, the scientific studies the NRCS neglected to conduct was an environmental screening of the soils and surface water to determine if these soils or surface water have any contaminants of concern that exceed any environmental thresholds.

The prime farmland that the NRCS has easements on have been farmed for decades and this was not organic farming, it was commercial farming, which included the use of agricultural chemicals, including pesticides, herbicides, fertilizers, and very possibly, biosolids. Although these potential contaminants would not affect agricultural crops, or even pastureland, fish are particularly sensitive to many of these potential COCs and fish are relatively sensitive to the pH of the water, water temperature, and the amount of dissolved oxygen in the water.

Residual fertilizers can increase the biological oxygen demand in the water, if biosolids were used, the sulfur in the biosolids is converted into sulfurous acid dropping the pH of the water, and certain herbicides and pesticides included metals that fish can be sensitive to (biosolids have elevated levels of metals including copper, zinc, chrome and lead and historic pesticides included arsenic).

It is known that the hydrology of this area is seasonal and unless the ditches are maintained, they make perfect habitats for reed canary grass, which overtime chokes the drainage and increases the biological oxygen demand, the combination of “stilled” water flow which increases water temperature and the increased biological oxygen demand reduces the dissolved oxygen in the water, potentially to lethal levels for aquatic organisms that obtain oxygen from the water.

If this water is in contact with COCs that are water soluble and are above the toxic limits for fish (the LD50), it is possible that potential endangered species could be adversely impacted, especially any fry, because they are more sensitive than mature fish. However, the NRCS did not bother conducting the normal scientific studies that would be conducted during a feasibility study to insure that the potential new habitat for fish would not be harmful to the fish.

The NRCS makes claims about ground water, but no studies were conducted by any licensed hydrogeologists and no geologic studies of any kind were conducted, nor are any biological studies provided including those by fish biologists to determine if the proposed new habitat for fish would be feasible.

SNR has seen air photos of the manmade wetland mitigation bank which uses the permitted point source MS4 storm water for its hydrology source and on several occasions the turbidity was so bad that it could be seen in the air photographs.

Ecology has placed a standard limit on turbidity of 25 NTU for discharges of point source water to protect aquatic organisms and to insure that phosphorus levels in the water do not become elevated. Turbidity at 25 NTU cannot be observed with the human eye and elevated phosphorous creates an elevated biological oxygen demand that can cause algal blooms and deplete dissolved oxygen levels.

Additionally, the human element must be considered per NEPA and the Snoqualmie River Valley has a historic heritage of agricultural production and there are upstream farms that are in the farmland protection program. Prior to the NRCS construction of the “FPE”, drainage on the Snoqualmie River floodway and floodway fringe was to the north.

After the “FPE” was completed, the drainage reversed 180 degrees and is now to the south, flooding the farms south of this completed project and as Mr. Johnson pointed out in his report, the NRCS will not fix the problems it causes with its flawed designs, nor apparently, will the property owners, because they have no incentive to do so considering their land is now worthless and is a negative asset with a lot of liabilities.

This is the problem with this NRCS program, the NRCS does all of the design internally, does not have the required multidisciplinary, independently peer reviewed, scientific studies conducted for feasibility before the lease is made, does not bother to determine how the surface waters are regulated, does not perform COC testing of the soils and surface water, and does not conduct restorations that are actually restoring the land to the conditions that existed prior to human activities that changed the natural hydrology.

Instead of conducting the historical research of the study area, the NRCS assumed that the “natural conditions” are those that existed in 1948 even though the NRCS had access to the Land Office maps and surveyor’s notes just as SNR has and the NRCS knows that there was no forest located in this floodway area prior to human activities that changed the drainage and hydrology of this area.

The NRCS knows that the Land Office maps show that a large marsh was present in the area of its projects, it should also know what vegetation was present based on the surveyor’s notes, which do not indicate that this was heavily forested land.

These notes state that it was a 1 foot deep cranberry marsh with “dwarf” intermittent trees and an understory of plants adapted for the wet marshy conditions, including devils club. There were no 80 foot high aspen, nor were there pines, there were stunted cedar, hemlock, spruce, and alder trees intermittently present in this area that was dominated with a marsh.

The cranberry is at most 1 foot high, the other understory plants are herbaceous and would be flattened by floodwaters, and this means that there would be no obstructions in the active floodway of the Snoqualmie River. It is unclear what the NRCS did when they built the "FPE" area because no one was ever allowed on the site, including scientists to see what was being done to the floodway.

The actions of the NRCS in this area have been kept secret from the community and access is prohibited, so the cause of the reversal in the flow of the surface water in the "FPE" area is only known by the NRCS who will not fix the problem because the lease exempts the NRCS from all design liabilities and puts these on an unmotivated property owner who now has a negative asset.

As previously discussed, this property owner is likely to simply not pay the property taxes and make the land the problem of the County. However, the affected owners of the agricultural land that is being flooded can sue for an ongoing water trespass if they choose to do so but that does negate that existing impacts to the human element in NEPA that the NRCS dismisses without discussion.

Additionally, the actual impacts the "FPE" will not be known until the next significant flood event (it has been 8 years since the last one), however, the impacts of the poplar plantations in the valley is known and these created adverse impacts to farmland and infrastructure.

The active floodway is not the same as the boundaries of the 1% floodplain. Floodwater is supposed to continue to move and drain in the floodway and even in the floodway fringe, it becomes ineffective flow flood storage outside of the floodway and floodway fringe.

In reality, the NRCS is clueless regarding the potential impacts to the environment and to the human element and is simply pushing forward because it is already committed without ever having conducted the required multidisciplinary, independently peer reviewed, scientific studies that should have been conducted as a feasibility study before any leases were made.

The NRCS cannot afford to write off a lease at this time because it has already committed the funds prematurely and it would be an embarrassment to the NRCS and the Department of Agriculture and may lead to investigations from the federal GAO.

Regardless, the "FPE" project is impacting the human element and a monoculture of water fowl are already attracted to the flooding caused by the reversal in flow of drainage combined with the wetland mitigation banks large permitted point source MS4 storm water detention facility. Thousands of ducks that decimate pastureland and crops. The NRCS wants to create a habitat to attract more water fowl including Canadian geese, which are also destructive to agriculture.

The entire program does not make sense; making excuses to take prime farmland in agricultural protection zones in an attempt to create a magnet for wildlife and water fowl (and even create fish habitats without conducting any scientific studies) which are destructive to agriculture, which is the human element. The whole concept of this program is contrary to NEPA which not only protects the environment it protects the human element as well.

The concept of the program is flawed; why would someone sell an easement to the NRCS on prime farmland that generates revenues, to have worthless land that does not generates revenues, creates liabilities including potential lawsuits, and requires ongoing expenditures forever to maintain the land, not to mention, having to fix the problems that the flawed NRCS designs created?

Instead, the owner will take the money and run and leave the problem to the County when the County is forced to take the property for nonpayment of property taxes.

Regardless, the lack of ANY actual multidisciplinary, independently peer reviewed, scientific studies as part of a feasibility study, prior to making any commitments is essential to ensure that if this program is going to be used, at least the NRCS will know if it is even feasible to do anything with the prime farmland it will make excuses to take.

This would also reduce risk and would also ensure that any "restoration" activities are truly restorations as close as possible to a time when human activities had not been conducted in the area ("natural conditions"). Using a 1948 air photograph as a guide is not only unscientific, it is not representative of anything close to "natural conditions".

King County actually had studies conducted on the Snoqualmie River Valley to reconstruct what the conditions were like in 1870. This work was done by Brian D. Collins and Amir J. Sheikh, Department of Earth and Space Sciences, University of Washington, February 21, 2002 and is entitled *"Mapping Historical Conditions in the Snoqualmie River Valley(RM0 – RM40)"*, Figure 9 is a map from this publication.

As can be seen on Figure 9, Collins and Sheikh identify the area where the NRCS projects are located as being Palustrine scrub-shrub wetland, not a forested floodplain. This matches what the 1871 Land Office map indicates that is present in this area. Instead, the NRCS creates a forested floodway, which did not exist in this area based on all historic data SNR reviewed. If the NRCS is going to conduct a restoration, it should be an actual restoration, not something that is based on a 1948 air photograph.

Without actual scientific data, as is required by NEPA, it is impossible to conduct an accurate feasibility assessment and it can lead to project failure because the information necessary to determine what to do with a site or if anything can be done with a site is unknown and is based on guesswork which is not adequate for NEPA requirements.

The first thing the NRCS should do before even considering a site it to determine if the land is actually fallow and incapable of agricultural use and this must be done scientifically because there may be environmental reasons why the land became fallow and unproductive that could not only make the site undesirable for restoration activities, but could lead to environmental cleanup activities as a MTCA or CERCLA site.

The NRCS did not even conduct a routine Phase I Environmental Site Assessment, let alone the level of study that would be required for a site that would have a manmade habitat for potentially endangered species where none are known to have existed before. Especially, farmland that has been in production for decades and could have had many different types of agricultural chemicals and fertilizers used on it, including biosolids.

The NRCS does not care what the impacts to the human element would be or the potential environmental impacts to sensitive species. If it cared about the human element it would not want to attract countless water fowl and wildlife into an agricultural area, including beavers which can flood prime farmland and are extremely difficult to control. If it cared about the human element it would not be secretive and not allow anyone, including scientists into the project areas that are causing major drainage problems to upstream, prime farmland in the farmland preservation program.

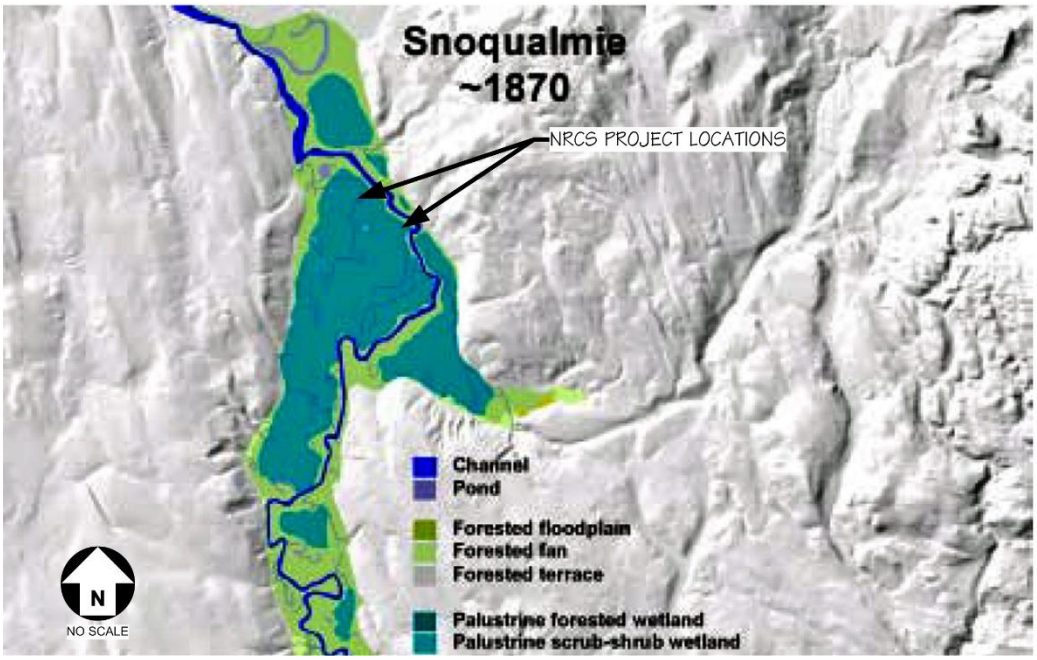


Figure 9 - From "Mapping Historical Conditions in the Snoqualmie River Valley (RM0 - RM40), Collins and Sheikh, 2002

If it cared about the human element, it would not create flood hazards recreating the poplar plantations that plagued the Snoqualmie River Valley and caused extensive flood damage, because the trees were not removed in the required 10 years. It would not create a forested floodway where none existed historically and therefore, the NRCS did not restore, it created something that is foreign to the floodway of the Snoqualmie River Valley in this area and did not enhance anything, but it did impact the human element and continues to do so.

The NRCS believes that relict channels from the meandering Snoqualmie River channel are manmade swales, it plans to fill in agricultural drainage systems and change the floodplain hydrology with NO scientific studies and not realizing that these are not Section 402 exempt agricultural drainage ditches, they are permitted point source MS4 storm water conveyances that cannot be altered by anyone other than Snohomish County Public Works.

In other words, the NRCS did not have any concern for the human element and no concern for the environmental element, it is agenda driven and had already leased the land without conducting the required multidisciplinary, independently peer reviewed, scientific studies that need to be conducted as part of the feasibility study before it commits to a lease.

Since the NRCS did not do as NEPA requires before it leased the land, it should now conduct these multidisciplinary, independently peer reviewed, scientific studies to identify potential impacts to the environment and the human element through an Environmental Impact Statement. The NRCS is clueless because it does not have the required studies.

The NRCS cannot determine that the land it has leases on is not impacted environmentally with contaminants of concern, it does not know the regulatory status of the agricultural drainage ditches, it knows nothing about the geology, hydrogeology, fluvial geomorphology, surface water hydrology of not only the project sites, but of the area, which will be affected by their activities and the area where the hydrology for the projects originates.

The NRCS has run a few models, but models are useless without all of the pertinent data and are not a substitute for conducting actual multidisciplinary, independently peer reviewed, scientific studies. If you are going to introduce fish into a manmade area where no known fish existed before, you had better have studies conducted by a fish biologist and conduct the environmental studies to insure there are no agricultural chemical residues in the soils, and you need to insure that you have a source of hydrology other than permitted point source MS4 storm water.

You also have to consider if the area is suitable for enticing wildlife and water fowl, because of the human element, but most importantly, when something goes wrong with a project, such as the "FPE" project, where the drainage in the floodway completely reversed flooding prime farmland, you need to find out why so you do not make the same mistake again. This leads to cumulative effects that are compounded on the human element and as anyone knows, it is not wise to continue to make the same mistakes.

The "FPE" is already causing severe impacts to the human element, it is unknown what the environmental impacts from this project is causing, but it is clear that similar tree plantations did cause severe damage to the human element during floods. It is unclear what the NRCS was trying to accomplish by building a forest in a floodway when there has never been a natural forest in the floodway of the Snoqualmie River based on comprehensive historical research.

Using a 1948 air photograph is not a basis for what natural conditions were prior to human activities in this area. It is unclear why the NRCS will not let inspections of this project be conducted by scientists and engineers to see why the drainage in the floodway has reversed. However LiDAR imagery taken in 2014 suggests that more than planting occurred for this project and that drainage may have been changed intentionally. The newer high resolution LiDAR imagery suggests that the drainageway to the north was filled in at the northern boundary of the project (Figure 10).

Additionally, because the NRCS conducted no environmental studies to determine what will happen to aquatic life that gets trapped in a forest during a flood. Floodwater must continue to move in the floodway, floodwaters that encounter obstructions that are closely spaced can create eddies and if the flow velocity is fast enough, these can be intense enough to injure or even kill aquatic life or even worse, the direct northerly flood flow could be dampened in the forested area, which could lead to the creation of ineffective flow flood storage.

This could affect the river channel fluvial geomorphology, could increase the height of the flood, and could create scour around the area where the flood waters have slowed in the forest. The models are not designed to simulate flood flow through a forest of 80 foot high closely spaced trees. This is why King County mandated that all poplar plantations be harvested within 10 years before they got large enough to cause worse flood damage than they already did.

The actual purpose of the NRCS projects are unclear because the described purposed does not match what the NRCS will actually accomplish with the existing or proposed project. The existing "FPE" project is not a restoration, it is not an enhancement, and the prime farmland was not more frequently flooded than any other farmland in this area of the Snoqualmie Valley; with significant floods occurring every 5 – 10 years and flood

conditions typically lasting no more than a week. This is not considered to be frequent and has worked for farmers since the 1870s (and earlier in the southern portion of the Valley).

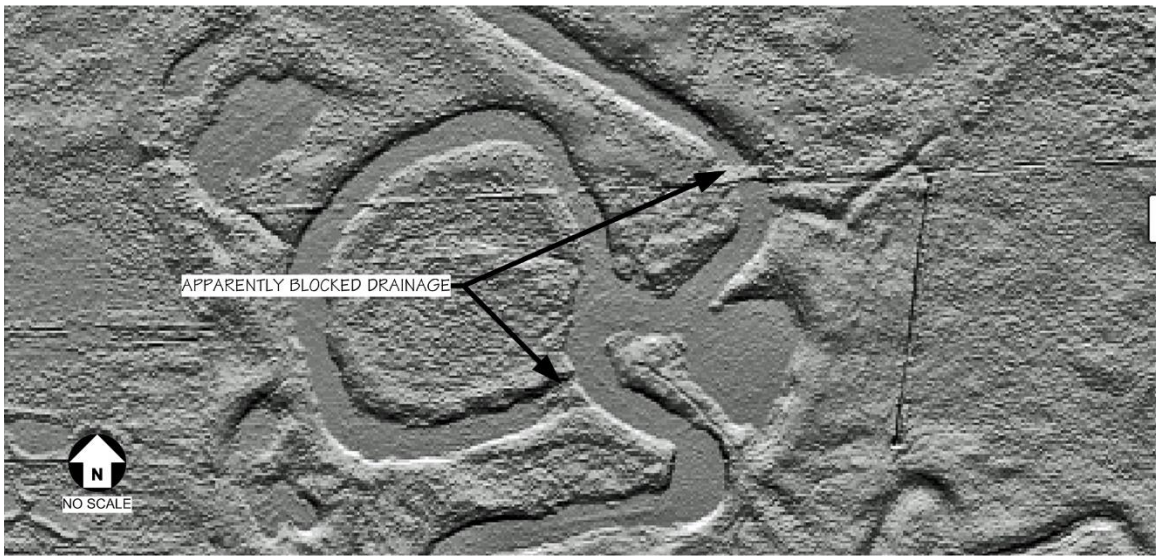


Figure 10 - From King County 2014 Snoqualmie River 3 meter resolution LiDAR, WDNR, 2017

The "FPE" project is causing the normal drainage in the floodway to change from the natural drainage direction to the north to drain to the south, flooding prime farmland in the farmland preservation program. There is no historical evidence that a forested floodway ever existed in this area and actual survey notes from the Land Office surveyor and a study commissioned by King County both indicate that there was no forested areas in this floodway. Restoration to 1948 conditions is not considered to be a true restoration, a restoration should match natural conditions (prior to human activity) as closely as possible.

The "WRP" project is supposed to "reconnect" the floodplain with the river, however, the floodway and floodway fringe area is fully connected with the Snoqualmie River. There are no manmade levees in this area or anything else preventing flood waters from completely covering the floodway and floodway fringe. The Pearson Eddy Slough is a manmade agricultural drainage ditch.

As is the case with most of the floodway and floodway fringe area in the Valley, these are only connected to the river during floods when overbanking occurs, this is how natural river systems work. These areas are connected and do connect during floods hence the name "FLOOD"way, this area is only supposed to be connected to the river during flooding that is significant enough for the river to overbank the natural levees.

The historic Land Office does not suggest that the floodway and floodway fringe was any more connected than it is now. One foot deep cranberry marshes are not conducive to a thriving fish habitat and the small stream that originated in this marsh provided minimal connectivity. The NRCS's "WRP" project does not propose to restore the area to the "natural conditions" that existed in 1871 and proposes to change the surface water hydrology of the floodway in a manner that is inconsistent with a restoration and is inconsistent with Section 502 of the Clean Water Act.

As previously discussed municipal storm water became permitted MS4 storm water in 2007, however the designation of being a point source began in 1987 with the revisions to the Water Pollution Control Act of 1972, as the Water Quality Act of 1987. Additionally, the NRCS has not conducted the required multidisciplinary, independently peer reviewed, scientific studies, including studies conducted by a fish biologist and the environmental studies necessary to determine if there are any residual agricultural chemicals and fertilizers in the soils that could impact fish.

Wetland hydrology is unconfined ground water aquifer hydrology and no hydrogeologic or geologic studies were conducted, nor were fluvial geomorphologic studies conducted and a fluvial geomorphologist did not provide assistance with the design of the proposed revisions to the drainage system on the "WPR" area.

SNR reviewed all documents provided by the NRCS and all documentation provided with the EA and did not find any site and area specific multidisciplinary, independently peer reviewed scientific studies that would be required to conduct work in a floodway, including changing the hydrology of this floodway to closely match the conditions that existed in 1871.

However, the NRCS will also have to contend with creating a source of hydrology because it cannot use permitted point source MS4 storm water for this purpose and neither can Mr. Woodward's wetland mitigation bank which is technically an illegal permitted point source MS4 detention facility that may qualify as a treatment facility, however, only permitted municipalities and entities who are included in the original NOI can manage this storm water per the actual permit and per 33 U.S.C. §1251 et seq. and RCW 90.48.

Based on the total lack of any multidisciplinary, independently peer reviewed scientific studies, the complete lack of scientific data, and lack of understanding of the surface water hydrology in the area and the inability to identify relict river channels correctly by determining that they are manmade swales, and the stated purpose of this project is moot since there are to manmade restrictions to the connectivity of the floodway and the river and the proposed work is NOT a restoration.

SNR strongly recommends that the NRCS conduct the studies they should have conducted and incorporate the findings from these studies in an Environmental Impact Statement as is required by Title 7 CFR, Subpart B, Chapter VI, Subchapter F, Part 650 as discussed in the next section of these comments.

The NRCS can then determine if it should proceed after it provides the reasons why its existing project is causing damage to the human element and may cause environmental damage also. No one other than the NRCS knows because access to this project is highly restricted and the project itself has been kept secret do to "contractual" reasons.

However, the NRCS needs to demonstrate that its first project met all goals and caused no damage whatsoever and that there will be no cumulative effects. Since the first project is causing harm to the human element and most likely, environmental harm, and is the only forested floodway in this area of the Snoqualmie River Valley where the natural conditions were that of a scrub-shrub wetland that was a cranberry mash that was only one foot deep, the NRCS should justify their completed project before they conduct others that do not include the required scientific studies.

COMPLIANCE WITH TITLE 7 CFR, SUBPART B, CHAPTER VI, SUBCHAPTER F, PART 650

Title 7 CFR is entitled "Agriculture", Part 650 is entitled "Compliance with NEPA", this part of the Code of Federal Regulations (rules) applies to the NRCS's requirements under the National Environmental Policy Act, NEPA, although it technically does not exempt any federal program from complying with the State Environmental Policy Act, "SEPA", which is typically required for all proposed actions that are conducted in floodways and floodway fringes (per the Shoreline Management Act) and any work in "critical areas" which includes wetlands and fish and wildlife habitat conservation areas.

The NRCS has identified the "WPR" area as being a wetland with fish and wildlife habitat conservation areas, which typically would always require a SEPA EIS especially when the scope of work includes changing the hydrology of the area, changing the natural geomorphology of the area through grading activities, and disturbing a wetland area and fish and wildlife habitat conservation areas, regardless of the reason. In fact, the NRCS has not provided a single wetland study or fish and wildlife habitat conservation area study that meets the requirements of the Shoreline Management Act.

Regardless, the NRCS is required to comply with Part 650 of Title 7 CFR, the NEPA requirements and after reviewing these requirements it is clear that the NRCS has not met these requirements and must conduct the multidisciplinary, independently peer reviewed, scientific studies of the project area and vicinity, including stream reconnaissance studies to the headwaters of the streams.

It must conduct the hydrogeologic studies to determine if there is a source of wetland hydrology, which would be an at surface unconfined ground water aquifer at a pressure greater than atmospheric per the Corps of Engineers requirements as one of the indicators of a wetland, saturated soil conditions as defined in the 1987 Corps of Engineers Wetlands Delineation Manual glossary, page A11 (and are codified in the State of Washington Administrative Code (WAC)).

It is virtually impossible to create a manmade unconfined ground water aquifer, these can only be naturally created. As discussed in this document, saturated soil conditions associated with inundation are discussed on page 44 (b), which states that inundation applies when the upper limit of the ground water hydrology is mean sea level. This is because the only time inundation and saturated soil conditions coincide with two meters or less of inundation, is in the marine shorelines, where unconfined at or near surface unconfined aquifers are common and so is inundation, with twice daily high tides.

It is also impossible to create natural streams because humans cannot duplicate the development of fluvial geomorphology or the hydrology necessary for a natural stream. The fluvial geomorphology is created by numerous different factors associated with stream formation, which begins with rills that become gullies that must intercept ground water base flow to sustain the stream hydrology at least seasonally. All natural streams have natural levees, a floodplain, and have bank full flow at least every three years.

Without ground water base flow, the feature is an ephemeral drainage system and in the Puget Lowlands where continental glaciation has occurred several times historically, there are relict glacial meltwater channels formed over 10,000 years ago. These include streams and rivers that were fed by melting continental and alpine glacial ice sheets and do have the characteristics of a "natural stream" but the water source ceased to exist throughout the Puget lowlands approximately 9,500 years ago.

Some of these relict glacial meltwater channels are occupied by underfit streams and rivers, however the vast majority of them are simply part of the modern day ephemeral drainage network. However, these features were commonly used as part of agricultural drainage systems and storm water drainage systems, including municipal storm water (using existing drainage features save a lot of money in excavation costs).

It is common practice for municipalities to divert the storm water on river valley plateaus (horsts) to the valley floor by diverting the storm water to ephemeral relict glacial meltwater channels that convey ephemeral drainage to the Valley floor anyway.

Once on the Valley floor this storm water drainage is diverted to any natural or manmade drainage system on the Valley floor that drains to the "receiving waters" which in this case is the Snoqualmie River which is Navigable Waters of the United States. This storm water was diverted to the manmade agricultural drainage systems and relict channels that are part of this drainage system.

In 1987, with the passage of the Water Quality Act revision to the Water Pollution Control Act, this storm water drainage from its origins to the outfall to receiving waters became a point source, even though agricultural drainage ditches are exempt from being point sources per Section 502 of this Act, because to be exempt the only water that can be in the agricultural drainage ditch is water derived from agricultural activities.

The Water Quality Act began regulating storm water as waste water and it requirement a permit to discharge this storm water to the "receiving waters" (Navigable Waters of the United States, per the Act). The permit requirements are in Section 402 of this Act and the permit that is required is a National Pollutant Discharge Elimination System permit AKA NPDES permit. However, it was not until 20 years after this Act was passed that the general municipal storm water NPDES permits were issued in Washington State, and became effective, January 2007.

Even though point sources were regulated since the passage of the Act in 1987, these did not become permitted point source MS4 systems until the permits were issued to the municipalities (including WSDOT, and even to the military bases; Joint Base Lewis McCord has a Phase II Municipal Storm water NPDES permit).

This changed the regulatory status of all storm water drainage systems, including those that used ephemeral relict glacial meltwater channels to convey the storm water, because the storm water is in a point source system and all parts of the system are permitted. Per 33 U.S.C. §1251 et seq., the only way a point source can cease being a point source is after it is discharged into the receiving waters at the permitted outfall or is infiltrated to ground water in a certified, approved storm water infiltration facility.

As discussed in this document, point source water is NOT Navigable Waters of the United States or State (these are receiving waters), a point source is designated for the conveyance of polluted storm water to the permitted point source MS4 outfall.

Both municipalities in that include the Snoqualmie River, King County covering the upper reaches and Snohomish County covering the lower reaches possess Phase I Municipal Storm water NPDES permits and both discharge permitted point source MS4 storm water to the agricultural drainage system in the floodway and floodway fringe, including Person Eddy Slough and Person Eddy Creek.

This is based on permitted point source MS4 maps SNR obtained from King County and based on SNR's field mapping of the storm water systems on the Plateau area and mapping along West Snoqualmie Valley Road NE, Duvall Washington which includes storm water generated on a pollution generating surface, which is conveyed to the agricultural drainage ditch system located in the Snoqualmie River Floodway and Floodway fringe.

Once permitted point source MS4 storm water is discharged into an agricultural drainage ditch system, the agricultural drainage ditch system becomes part of the permitted point source MS4 system and the point source exemption ceases to exist for the agricultural drainage ditches. It should be noted that much of the municipal storm water systems were installed before the Water Quality Act of 1987 was promulgated. However, this does not prevent the permitted point source MS4 storm water from being regulated or the agricultural drainage ditches from becoming part of this permitted point source system.

Had the NRCS conducted the required multidisciplinary, independently peer reviewed scientific studies when conducting feasibility studies for the two projects it should have found out what the hydrology sources were for the agricultural drainage system, that includes Person Eddy Creek. Even though these storm water systems were not permitted in 2003, the storm water conveyed from these systems was still a point source. Per Section 502 of the Act, all point sources are considered to be polluted. Additionally, it was clear that all municipal storm water systems for counties the size of King and Snohomish County would be permitted.

Regardless, these studies were not conducted, in fact there is no evidence that any feasibility studies were conducted prior to obtaining the leases for the land that the NRCS has completed a project on and is proposing to conduct on the land adjoining the existing completed project. To this date, not even a Phase I ESA was conducted on historic, prime farmland that had been in use for decades.

Considering the NRCS used to be the Soil Conservation Service which assisted farmers in many ways, including installing agricultural drainage systems (above ground and below ground) and even constructing levees to protect farmland (but not in the Snoqualmie River Valley. As a division of the United States Department of Agriculture, the NRCS should know that agricultural land is not pristine, untouched by humans, land, it was in active agricultural production which includes the use of agricultural chemicals and fertilizers.

These chemicals included pesticides and herbicides and the fertilizes often included biosolids, which became highly pushed on agriculture in the 1960s as sewer treatment plants were built and these plants needed to get rid of the sludge generated during the treatment.

To this day, the USEPA and Ecology "market" the use of biosolids in agriculture, but do not warn the farmers of the potential consequences of using this material that has limited testing or analysis and does not indicate the level of sodium chloride and sulfur that is present, nor does the product literature provide information on the levels of metals, including copper, zinc, and arsenic, or a listing of other chemicals such as brominated compounds used in fire retardants for children's clothing, or the content of pharmaceuticals and pollutants such as 1,4-dioxane, which has an MCL of 5 µg/L in Washington State.

The USEPA and Ecology would not "market" these products if they thought endangered species would come in contact with the fields where this "fertilizer" was used and on agricultural lands, these biosolids are not known to exceed hazardous MCL limits (Model Toxic Control Act Limits). However, the impacts to sensitive species, especially aquatic species can be significant, especially due to the elevated levels of copper, zinc, and arsenic, but it is unknown what impact the other chemicals in this fertilizer will have on aquatic organisms.

What is known, is that repeated uses of biosolids continues to increase that amount of sodium chloride and sulfur in the soil. As these levels increase, crop production decreases for two reasons, the salt levels exceed the tolerance of the plants and the soil pH drops below the tolerance of the plants. This is why it is important to sample and analyze the soils in the proposed project area to insure that there are no potential threats to the environment that will be created, including the aquatic and animal life.

This is especially the case if the NRCS were to do what the program intended, to convert fallow farmland into a "natural environment" because one of the reasons the farmland may be fallow is due to what was put on the land historically. If this is the case, this land would not be suitable for any type of aquatic life under most circumstances, especially threatened or endangered species.

The following is from "Part 650" (the actual Title 7 CFR uses the section symbol)"

> *§650.1 Purpose.*
>
> *(c) These procedures provide that*
>
> *(1) Environmental information is to be available to citizens before decisions are made about actions that significantly affect the human environment;*
>
> *(2) NRCS assisted actions are to be supported to the extent possible by accurate scientific analyses that are technically acceptable to NRCS;*
>
> *(3) NRCS prepared NEPA documents are to be available for public scrutiny; and*
>
> *(4) Documents are to concentrate on the issues that are timely and significant to the action in question rather than amassing needless detail.*
>
> *(d) Procedures for implementing NEPA are designed to ensure that environmental consequences are considered in decision making. They allow NRCS to assist individuals and nonfederal public entities to take actions that protect, enhance, and restore environmental quality.*
>
> *(e) These procedures make possible the early identification of actions that have significant effects on the human environment to avoid delays in decision making.*

The NRCS has not met the requirements of §650.1; the decisions were made in 2003 and a canvas was made of farmers in the Valley, the local municipalities, and the Counties were asked if they were provided with environmental information on the then proposed projects and none of the persons or entities asked stated that they were aware of the proposed projects nor were they provided any environmental information regarding the proposed projects.

SNR has not seen ANY scientific data from any scientific studies conducted on and in the vicinity of the proposed projects, including studies that would have been conducted in 2003. This EA is the first NEPA document made available for public scrutiny and does not include the existing project called "FPE", there are no known documents that date back to 2003 and the public was not provided any NEPA documentation prior to the commencement of the "FPE" project which began in 2009 – 2010.

This was a surprise of the owners of the adjoining farmland and to the surprise of King County (and Snohomish County), because there was zero notice prior to starting the activities and there was zero notice or opportunity

to review the NEPA documents prior to the NRCS actually leasing these prime farmland properties. It is even unclear if the actual county and state permits were obtained for this project.

It is clear that the NRCS did not meet any of the objectives of §650.1 for the "FPE" nor did they for the "WRP", because although an EA is now provided, there was no opportunity to comment on the proposed NRCS actions before the easements were purchased, when the project "WRP" project was permitted with Snohomish County in 2013, or at any time prior to the NRCS already making the commitment to conduct the project.

> *§650.2 Applicability.*
>
> *This rule applies to all NRCS assisted programs including the uninstalled parts of approved projects that are not covered by environmental documents prepared under previous rules for compliance with NEPA. It is effective on the date of publication of the final rule. NRCS is to consult with CEQ in the manner prescribed by 40 CFR 1506.11 if it is necessary to take emergency actions.*

As previously discussed there was no public notice and the NRCS did not provide any NEPA information to the public prior to purchasing the easement or even prior to commencing the "FPE" project. NEPA was "enacted" on January 1, 1970 and affects all federal government projects. It is obvious that the NRCS is unfamiliar with NEPA, including Title 7 CFR § 650 that specially pertains to the Department of Agriculture, which the NRCS is part of.

The EA SNR has reviewed and is commenting on in this document should have been an EIS and it should have been prepared before the NRCS proceeded with obtaining the leases in 2004, 13 years ago. Apparently the NRCS believes that these provisions of federal code do not apply to its actions and the NRCS does not take impacts to the environmental and human elements seriously. It is clear that the NRCS did not comply with NEPA in the past and is still not in compliance because there are zero multidisciplinary, independently peer reviewed, scientific studies provided by the NRCS with this EA or at any time.

> *§650.3 Policy.*
>
> *(a) NRCS mission. The NRCS mission is to provide assistance that will allow use and management of ecological, cultural, natural, physical, social, and economic resources by striving for a balance between use, management, conservation, and preservation of the Nation's natural resource base. The NRCS mission is reemphasized and expanded to carry out the mandate of section 101(b) of NEPA, within other legislative constraints, in all its programs of Federal assistance. NRCS will continue to improve and **coordinate** its plans, functions, programs, and recommendations on resource use so that Americans, as stewards of the environment for succeeding generations—*
>
> *(1) Can **maintain safe**, healthful, **productive**, and esthetically and culturally pleasing surroundings **that support diversity of individual choices**; and*
>
> *(2) Are encouraged to attain the widest range of beneficial uses of soil, water, and related resources without degradation to the environment, **risk to health or safety**, or **other undesirable and unintended consequences**.*

(b) NRCS environmental policy. NRCS is to administer Federal assistance within the following overall environmental policies:

(1) Provide assistance to Americans that will motivate them to maintain equilibrium among their ecological, cultural, natural, physical, social, and economic resources by striving for a balance between conserving and preserving the Nation's natural resource base.

(2) Provide technical and financial assistance through a systematic ***interdisciplinary approach to planning and decision making*** *to insure a balance between the natural, physical, and social sciences.*

(3) Consider environmental quality equal to economic, social, and other factors in decision making.

(4) Insure ***that plans satisfy identified needs and at the same time minimize adverse effects of planned actions on the human environment*** *through* ***interdisciplinary planning before providing technical and financial assistance****.*

(5) Counsel with ***highly qualified and experienced specialists*** *from within and* ***outside*** *NRCS in* ***many technical fields as needed****.*

(6) ***Encourage broad public participation*** *in defining environmental quality objectives and needs.*

(7) ***Identify and make provisions for detailed survey****, recovery, protection, or preservation of unique cultural resources that otherwise may be irrevocably lost or destroyed by NRCS assisted project actions, as required by Historic Preservation legislation and/or Executive Order.*

(8) ***Encourage local sponsors to review with interested publics the operation and maintenance programs of completed projects*** *to insure that environmental quality is not degraded.*

(9) ***Advocate the retention of important farmlands*** *and forestlands, prime rangeland, wetlands, or other lands* ***designated by State or local governments****. Whenever proposed conversions are caused or encouraged by actions or programs of a Federal agency, licensed by or require approval by a Federal agency, or* ***are inconsistent with local or State government plans****,* ***provisions are to be sought to insure that such lands are not irreversibly converted to other uses*** *unless other national interests override the importance of preservation or otherwise outweigh the environmental benefits derived from their protection****. In addition, the preservation of farmland*** *in general* ***provides the benefits of open space, protection of scenery, wildlife habitat, and in some cases, recreation opportunities and controls on urban sprawl****.*

(10) Advocate ***actions that reduce the risk of flood loss****;* ***minimize effects of floods on human safety, health, and welfare****; and restore and preserve the natural and beneficial functions and values of flood plains.*

(11) Advocate and assist in the reclamation of abandoned surface mined lands and in planning for the extraction of coal and other nonrenewable resources to facilitate restoration of the land to its prior productivity as mining is completed.

(12) Advocate the protection of valuable wetlands, threatened and endangered animal and plant species and their habitats, and designated ecosystems.

(13) Advocate the conservation of natural and manmade scenic resources to insure that NRCS assisted programs or activities protect and enhance the visual quality of the landscape.

(14) Advocate and assist in ***actions to preserve and enhance the quality of the Nation's water****s.*

Again, the NRCS has not complied with §650. There was no coordination with any person or entity prior to the NRCS entering into leases on the prime farmland. In fact, as previously state the EA SNR is commenting on is the first NEPA document anyone has seen, including the municipalities and Counties affected by these actions and there was NO coordination or NEPA disclosures on the "FPE" that is already completed and is causing dramatic impacts to the human element and may be impacting the environment.

However, no one is allowed on the "FPE" project to find out if there are environmental impacts and the NRCS has not conducted any studies to determine if there are or even what is causing the dramatic impact on the human element because this project reversed the natural drainage in this area and this is flooding prime farmland in the King County farmland preservation program. In fact, as stated in this document, King County has already spent over $150,000 trying to address the flooding caused by the construction of the "FPE" and there have not been any significant river flooding events in this valley since 2009.

It is unclear what will happen when a significant flood event does occur, however, based on the issues caused by poplar plantations that were supposed to be cut within 10 years, these plantation style "tree farms" caused significant flood damage that would not have occurred if they were not present in the floodway and there is no reason to believe that the NRCS' planting of a "plantation style forest" in the floodway will be any different than the poplar plantations were in increasing the damage caused by river flooding.

The NRCS was supposed to conduct the necessary feasibility studies, using the interdisciplinary scientific approach and to use any and all necessary scientific disciplines including scientists not in the employ of the NRCS **before the action is taken**. **There was NO broad public participation** either, because the NRCS made no effort to involve the public.

There is no evidence that any scientific studies were conducted whatsoever, including those that are fundamental before any land that is known to have used agricultural grade insecticides, fungicides, and fertilizers, including biosolids.

Additionally, much of the land in this area was used for dairying which means animals in the field, manure ponds, and other potential impacts to the ground water and soils, yet the NRCS did not conduct even the basic Phase I Environmental Site Assessment and did not collect and sample any soils or ground water.

In fact the NRCS did not even obtain maps of the permitted point source municipal storm water systems or conduct studies to determine if these systems could potentially impact the feasibility of their proposed project.

The local sponsor of the "PFE" has never met with the public to review with interested publics the operation and maintenance programs of completed projects and this owner refuses to meet with those who are impacted by the project this person sponsored. Additionally the local sponsor of the "WRP" has not met with the public either and this is supposed to be done before the lease is entered into.

The NRCS did not advocate for protecting prime farmland, it used the excuse that the reason it is not prime, is because it is flooded frequently, but provides no studies that indicate that this prime farmland is flooded any more frequently than all of the other prime farmland in the Snoqualmie River Valley.

If for some reason there were drainage problems because the agricultural drainage system was not operating properly the NRCS should have considered assisting with the repair of this system rather than converting this prime farmland to worthless land that provides no ecological or functional value and is a nuisance because it is impacting prime farmland upstream if its project by causing the natural drainage in this area of the floodplain to reverse and flood this prime farmland.

Any project that has goals of changing the surface water hydrology in a significant river floodway and of attracting hordes of migratory water fowl and wildlife in an agricultural district with land in the farmland preservation program is ludicrous. The cumulative effects of the "FPE" project and the "illegal' wetland mitigation bank attracted thousands of one type of water fowl, ducks.

These ducks decimated pastureland and crops; putting the only remaining dairy in this area out of business. Additionally, the cumulative effects of the "FPE" project and the wetland mitigation bank have attracted beaver into this area, which is also affecting the drainage. The Department of Agriculture should know that beavers and farming are incompatible. These predictable outcomes should have been realized by the NRCS, yet there was no public notice and to NEPA documents provided to the public before the leases were entered into.

The best and only use for the Snoqualmie River floodway and floodway fringe is agriculture, this is why these areas are zoned for agriculture by the Counties and at least in King County, the farms are under the County's farmland preservation program. The NRCS did not even bother to consider if its proposed actions are inconsistent with local or State government plans and ignored providing provisions to insure that such lands are not irreversibly converted to other uses.

The NRCS did not weigh the benefits of farmland stated in this section: *"In addition, the preservation of farmland in general provides the benefits of open space, protection of scenery, wildlife habitat, and in some cases, recreation opportunities and controls on urban sprawl"* against irreversibly converting prime farmland into worthless and that only has liabilities and the "FPE" has plenty of these. With the sponsor being unresponsive to the problems that have been created that are heavily impacting the human element, and possibly the environmental element as well. The reversal of drainage in this area is bound to affect some of the aquatic species that lived in the normal northerly drainage direction of the floodway.

The NRCS did not conduct ANY scientific studies when they were supposed to, BEFORE the leases were entered into, nor have they conducted any scientific studies to date, especially multidisciplinary, independently peer reviewed, scientific studies of all disciplines.

Instead they take the engineering approach and run models that indicated there would be no drainage or flooding problems with the "FPE", however, the models were wrong. Models cannot replace actual scientific

studies and it is the responsibility of the NRCS to prevent flooding on the adjoining lands and to reduce flooding. At this point it is clear that a huge plantation style tree farm in the western floodway adjacent to the Snoqualmie River will cause at least as much damage as the historic poplar plantations did.

There is a difference between an incorrect model and what actually occurs, and in this case the NRCS relied too much on models and used zero common sense and would not listen to scientific experts who advised them that the very problems that are occurring, would occur. The NRCS staff refused to listen to the expert and proceeded with a project that is not a restoration, is not an enhancement, and does not even provide the habitat functions that the prime farmland did. The NRCS leaped before it looked and thereby violated these provisions of NEPA.

At this time anyone who lives in the vicinity of the existing "PFE" is at risk and if the "WRP" proceeds, the cumulative effects will be devastating to the human element and potentially to human life and their livelihoods, because livestock is raised on the agricultural land located immediately south of the "PFE" project.

This was prime farmland until it became flooded due to the "PFE" project, however the entire western floodway of the Snoqualmie River is not impeded and as the trees continue to grow and fill in, this will get worse. The "WRP" is like putting the last "nail in the coffin" and the cumulative effects will create a major increase in the flood hazards that already exist and could cause flood levels to rise significantly enough to overtop critter pads, which could and probably will kill livestock. I could also put the farm houses under water and could potentially result in the loss of life in addition to the loss of property.

Additionally, on a low gradient river valley, like the Snoqualmie River Valley where the slope to the north is typically 0.1% or less, any rise in flood elevations can have a significant impact upstream. In 2009 the only last resort access road to the eastern side of the Snoqualmie Valley was overtopped destroying the road surface.

However, even a moderate rise in the flood elevation could have removed the road completely, which would isolate everyone on the eastern side of the Valley for a significant period of time. The infrastructure in the Valley needs to be protected unless the NRCS wants to assume full responsibility for the damages and loss of life that occurs. However, as indicated in this document, in the NRCS's own words, the NRCS claims no liability for its actions.

The NRCS did not bother with the necessary scientific studies that would need to be comprehensive, including fluvial geomorphologic stream reconnaissance studies to the stream headwaters. Had these studies been conducted, the NRCS should have been made aware of the fact that much, if not all of the water from the plateau area and from West Snoqualmie Valley Road NE is point source storm water which cannot be used for any purpose other than to be kept in the point source system until it is discharged to the receiving waters.

Point source water is assumed to be polluted because the only purpose of a point source is to convey and if necessary, detain, polluted storm water to the outfall to the receiving waters. The NRCS will run into significant water quality and regulatory issues if it proceeds with the "WRP" as planned. Plus there was no soil sampling and laboratory analysis of the soils or ground water to determine that these do not have significant levels of contaminants of concern for the fish and wildlife that the NRCS hopes to attract.

§650.4 Definition of terms.

Definitions of the following terms or phrases appear in 40 CFR part 1508, CEQ regulations. These terms are important in the understanding and implementation of this rule. These definitions are not repeated in the interest of reducing duplication:

Categorical exclusion. (40 CFR 1508.4)

Cooperating agency. (40 CFR 1508.5)

Cumulative impact. (40 CFR 1508.7)

Environmental impact statement (EIS). (40 CFR 1508.11)

Human environment. (40 CFR 1508.14)

Lead agency. (40 CFR 1508.16)

Major Federal action. (40 CFR 1508.18)

Mitigation. (40 CFR 1508.20)

NEPA process. (40 CFR 1508.21)

Scope. (40 CFR 1508.25)

Scoping. (40 CFR 1501.7)

Tiering. (40 CFR 1508.28)

(a) Channel realignment. Channel realignment includes the construction of a new channel or a new alignment and may include the clearing, snagging, widening, and/or deepening of the existing channel. (Channel Modification Guidelines, 43 FR 8276).

(b) Environmental assessment (EA). (40 CFR 1508.9)

(1) An environmental assessment is a concise public document for which a Federal agency is responsible that—

*(i) Briefly provides sufficient evidence and analysis for **determining whether to prepare an environmental impact statement** or a finding of no significant impact.*

(ii) Aids an agency's compliance with the Act when no environmental impact statement is necessary.

*(iii) Facilitates preparation of an environmental impact statement **when one is necessary**.*

(2) An environmental assessment includes brief discussions of the need for the proposal, alternatives as required by section of the environmental impacts of the proposed action and alternatives, and a list of agencies and persons consulted.

(c) Environmental evaluation. The environmental evaluation (EE) (formerly referred to by NRCS as an environmental assessment) is the part of planning that inventories and estimates the potential effects on the human environment of alternative solutions to resource problems. A wide range of environmental data

together with social and economic information is considered in determining whether a proposed action is a major Federal action ***significantly affecting the human environment****. The environmental evaluation for a program, regulation, or individual action is used to determine the need for an environmental assessment or an environmental impact statement. It also aids in the consideration of alternatives and in the identification of available resources.*

(d) Federally assisted actions. These actions are planned and carried out by individuals, groups, or local units of government largely on nonfederal land with technical and/or financial assistance provided by NRCS.

(e) Interdisciplinary planning. NRCS uses an interdisciplinary environmental evaluation and planning approach in ***which specialists and groups having different technical expertise act as a team to jointly evaluate existing and future environmental quality****. The* ***interdisciplinary group considers structure and function of natural resource systems, complexity of problems, and the economic, social, and environmental effects of alternative actions****.* ***Public participation is an essential part of effective interdisciplinary planning****. Even if an NRCS employee provides direct assistance to an individual land user,* ***the basic data used is a result of interdisciplinary development of guide and planning criteria****.*

(f) ***Nonproject actions****. Nonproject actions consist of technical and/or financial assistance provided to an individual, group, or local unit of government by NRCS primarily through a cooperative agreement with a local conservation district, such as land treatment recommended in the Conservation Operations, Great Plains Conservation, Rural Abandoned Mine, and Rural Clean Water Programs. These actions may include consultations, advice, engineering, and other technical assistance that land users usually cannot accomplish by themselves. Nonproject technical and/or financial assistance may result in the land user installing field terraces, waterways, field leveling, on farm drainage systems, farm ponds, pasture management, conservation tillage, critical area stablization and other conservation practices.*

(g) Notice of intent (NOI) (40 CFR 1508.22). A notice of intent is a brief statement inviting public reaction to the decision by the responsible Federal official to prepare an EIS for a major Federal action. The notice of intent is to be published in the Federal Register, circulated to interested agencies, groups, individuals, and published in one or more newspapers serving the area of the proposed action.

(h) ***Project actions****. A project action is a formally planned undertaking that is carried out within a specified area by sponsors* ***for the benefit of the general public. Project sponsors are units of government*** *having the legal authority and resources to install, operate, and/or maintain works of improvement.*

(i) Record of Decision. (ROD) (40 CFR 1505.2). A record of decision is a concise written rationale by the RFO regarding implementation of a proposed action requiring an environmental impact statement. This was previously defined by NRCS as a Statement of Findings (SOF).

(j) Responsible Federal official (RFO). The NRCS Administrator is the responsible Federal official (RFO) for compliance with NEPA regarding proposed legislation, programs, legislative reports, regulations, and program EIS's. NRCS state conservationists (STC's) are the RFO's for compliance with the provisions of NEPA in other NRCS assisted actions.

(k) Significantly. (40 CFR 1508.27) "Significantly" as used in NEPA ***requires considerations of both context and intensity****:*

(1) Context. This means that the significance of an action ***must be analyzed in several contexts such as society as a whole*** *(human, national),* ***the affected region, the affected interests, and the locality****. Significance varies with the setting of the proposed action. For instance, for a site specific action, significance* ***usually depends on the effects in the locale*** *rather than in the world as a whole. Both short and long term effects are relevant.*

(2) Intensity. ***This refers to the severity of impact.*** *Responsible officials must bear in mind that more than one agency may make decisions about partial aspects of a major action.*

The following should be considered in evaluating intensity:

(i) Impacts that may be both beneficial and ***adverse****. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.*

(ii) The degree to which the proposed action affects public health or safety.

(iii) ***Unique characteristics of the geographic area*** *such* ***as proximity to*** *historic or cultural resources, park lands,* ***prime farmlands****, wetlands,* ***wild and scenic rivers,*** *or ecologically critical areas.*

(iv) The ***degree to which the effects on the quality of the human environment are likely to be highly controversial****.*

(v) The ***degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks****.*

(vi) The ***degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration****.*

(vii) ***Whether the action is related to other actions with individually insignificant but cumulatively significant impacts****.* ***Significance exists*** *if it* ***is reasonable to anticipate a cumulatively significant impact on the environment****.* ***Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts****.*

(viii) ***The degree to which the action may adversely affect districts, sites, highways, structures,*** *or objects listed in or eligible for listing in the National Register of Historic Places or* ***may cause loss or destruction of significant scientific, cultural, or historical resources****.*

*(ix) The **degree to which the action may adversely affect an endangered or threatened species** or its habitat that has been determined to be critical under the Endangered Species Act of 1973 as amended.*

*(x) Whether the action **threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment**.*

*(l) Finding of no significant impact (FNSI). (40 CFR 1508.13) "Finding of No Significant Impact" means a document by a Federal agency briefly presenting the reasons why an action not otherwise excluded (§1508.4) **will not have a significant effect on the human environment**, and an environmental impact statement therefore will not be prepared. It shall include the environmental assessment or a summary of it and shall note any other environmental documents related to it*

(§1501.7(a)(5)). If the assessment is included, the finding need not repeat any of the discussion in the assessment but may incorporate it by reference.

The after the fact, EA, which should have been done before any purchase of easements, does not address cumulative effects at all. There are no scientific studies, including the required multidisciplinary studies that should be independently peer reviewed. This is essential when a proposed project or projects are to be conducted in an inherently dangerous area, where major flooding can and does occur and where drainage must be unhindered in the active floodway.

Mistakes and unintended consequences are much more serious in areas where significant danger already exists. The active floodplain of a "wild" significant river such as the Snoqualmie River that can reach flow volumes of between 80,000 and 100,000 cubic feet per second in the area where the NRCS projects are located is a dangerous place to conduct any changes to the geomorphology, hydrology, or any other changes that can intensify the flood damage.

The NRCS staff do not live in this area so it is unimportant to them, but it is important to those who live in this area and make their livelihoods on 3rd and 4th generation farms that are being impacted already due to the construction of the "FPE" that is impacting the natural drainage and causing a 180 degree reversal in the floodway drainage, something not predicted by the "models" simply because the NRCS skipped numerous steps before purchasing the easements.

The NRCS points to models that are not based on any scientific studies and tweaks the model so that no impact is shown. However, the model is wrong for the wrong reasons, lack of scientific data and because the NRCS is already committed to conduct the project because it did not conduct the required (by NEPA and common sense) and necessary feasibility studies and evaluate the impacts **before** committing this federal department's resources to purchase the easements.

Without properly addressing the cumulative effects, the NRCS is violating another provision of their own NEPA code. Considering that zero scientific studies that are required to insure that there is no harm to the environment and the human element these studies need to be conducted and the cumulative effects evaluated by independent scientists who hopefully will not make the same mistakes NRCS staff have (this should be a team of independent, multidisciplinary scientists).

The NRCS simply ignores its mistakes and is destined to repeat them, because they don't investigate them to find out what went wrong. It is unclear if this is arrogance, butt covering, sweeping the problems under the carpet, a NRCS local policy, or simple negligence, regardless the NRCS is violating its own Title 7 CFR knowingly and is putting the citizens that live in this area is extreme danger, simply because it will not and has not even adhere to its own code.

There were no interdisciplinary scientific studies conducted and independently peer review prior to commencing any action during the feasibility phase of the project. In fact SNR has not seen any scientific report that would be necessary to evaluate the feasibility of the proposed action.

Public participation was never a component of the feasibility of the project, was not a factor in the actual lease purchases, and has never been a factor in any of the stages of the project, which were actually kept secret from the public. There was not public involvement prior to the purchase of the lease and the actual commencement of the "FPE" project.

The public had to organize itself and protest this project, which led to the NRCS meeting with these concerned individuals, but ignoring the public concerns and lying about what they would do, completely dismissing the concerns of the public's scientist who warned the NRCS about inevitable surface water hydrology problems and a major increase in the risk of flood damage to upstream properties.

There was only one public discussion on the "WRP" which included the presence of police, had a Delphi trained facilitator and was designed to tell the public what the NRCS intended to do and was not conducted to find out what the public concerns were.

This is because the NRCS had already committed itself to the projects 12 years earlier, without every notifying the public and getting public comments before the NRCS committed to the project, with absolutely no scientific studies necessary to determine if the projects were feasible from a NEPA prospective and from a scientific and engineering prospective.

The "FPE" has already caused MAJOR harm to the human element (this is much more severe that significant harm) and is most likely causing harm to the environmental element but the NRCS will not allow independent study of the "FPE" which is off limits to anyone other than the property owner and has the same level of secrecy that one would expect at the CIA not the NRCS.

This section of the Department of Agriculture's own code (written by the Department) states: *"Public participation is an essential part of effective interdisciplinary planning"*, yet the NRCS never included the public in the planning process. The entire floodway and floodway fringe of the valley (and the base flood elevation floodplain where present) has been used agriculturally since as early as the 1860s (some agricultural operations started even earlier).

It is home to the culturally significant Carnation Farms, the culture of the valley was that associated with agriculture and continues to be associated with agriculture, and to this day, the only reasonable use of these areas of the valley is agriculture, where some of the best farmland in King and Snohomish Counties is located.

This "wild river" Valley is also home to thousands of citizens who live in the cities located in this Valley, Duvall (closest to the NRCS projects), Carnation (which has special flooding problems because this is where the confluence of the Tolt River enters the Snoqualmie), and Fall City, where the Raging River forms a confluence with the Snoqualmie River.

Any changes in the Snoqualmie River hydrology, including the floodway and floodway fringe can result in unpredictable, major consequences that not only effects the farmers in the Valley but also affects the citizens that live in these cities and those that live in the unincorporated areas of the eastern side of the Snoqualmie River Valley. The last major flood, that is still being studied, because the magnitude of the flooding was unlike any flood known to have occurred in the Valley followed the removal of the dam at Snoqualmie Falls, where the Department of Energy failed to communicate with the public and comply with NEPA requirements.

The Public and especially those who own the agricultural land are well aware of unintended consequences that threaten their lives, their land, their livelihood, the livestock, their homes, and their way of life, with many of the farmers being third and fourth generation farmers on the same land. The farmers know what can happen if the hydrology and geomorphology of the floodway and floodway fringe is changed and they know the damage that wildlife, especially migratory birds and beavers can do to crops that pastures.

Due to the very low gradient of the Snoqualmie River Valley (0.1% or less to the north), any rise in the flood elevations can cause a major impact upstream, including the destruction of infrastructure, the stranding of all of the citizens on the east side of the valley, and flooding of streets and homes (Figures 11 – 13).

Figure 11 - The impacts on the citizens of the Snoqualmie River Valley during the 2009 flood event, King County, 2017

The flood element is a concern of King County and Snohomish County and after the "FPE" dismal failure, creating major impacts to the floodway hydrology, impacting the human element upstream and potentially,

impacting all of the citizens upstream in the Snoqualmie River Valley. Snohomish County has not granted flood permits for this proposed project.

SNR could not find any proponents of the NRCS projects, except Victor Woodward, the owner of the wetland mitigation bank that creates cumulative effects in this area and uses diverted permitted point source MS4 storm water as a hydrology source, effectively creating an extremely large storm water detention facility.

The use of prime farmland for these projects is contrary to the Department of Agriculture mission and to make an excuse that these properties are not prime due to frequent flooding is ludicrous, considering that the Snoqualmie River only has significant floods every 5 – 10 years, the last significant flood was in 2009, eight (8) years ago. This is not frequent and it did not change the characteristics of the farmland. In reality, as long as all of the livestock can be safe on the critter pads, the flooding brings rich sediments to the farmland, which is the reason this is prime farmland in the first place.

What is even worse is creating environments that impact the surface water and geomorphology of the floodway and floodway fringe, including the use of large woody debris, changing historic drainage, removing natural river features the NRCS mistakenly identifies as manmade swales, causing river water to backflow into the manmade agricultural drainage ditch called the Pearson Eddy Slough, and planting vegetation that is not native to the Valley and/or that attracts beaver and undesirable water fowl that can decimate and destroy pastureland and cropland.

Figure 12 - Flooding of homes and properties in the Snoqualmie River Valley in 2009, King County, 2017

Figure 13 - Road access blocked to the east side of the Valley by the 2009 flood, Kind County, 2017

These projects are incompatible land uses in an agricultural wild river valley which is why all of the land in this valley that is located in the river's floodway and floodway fringe is zone agriculturally and is why most of the farmland in the King County portion of the river valley is in the farmland preservation program. Considering the NRCS conducted zero scientific studies, let alone the interdisciplinary studies required by NEPA in the feasibility stage of these projects.

The NRCS has not provided any documentation on the feasibility studies, or any documents that show the encouraged public involvement whatsoever, the NRCS kept the projects secret from the public until they had already commenced work on the "FPE" and did not even conduct the basic environmental studies, such as a Phase I ESA, did not collect any soil samples or ground water samples for analysis to determine if there are any potential environmental impacts to endangered species and other sensitive wildlife, did not consider the potential impacts to all of the citizens in this river valley.

The NRCS has no scientific data that is critical to determining the impacts of the proposed and completed actions or what impacts the cumulative effects will have and did not even bother conducting the necessary geologic, hydrogeologic, and other geologic studies including fluvial geomorphologic studies and stream reconnaissance studies to the headwaters.

It did not consider the potential impacts of other regulatory programs, such as 33 U.S.C. §1251 et seq. (AKA the Clean Water Act) and did not compare the hydrology of the 1871 Land Office maps to the modern day hydrology, which would strongly indicate that virtually all of the hydrology in the floodway is in manmade drainage systems that would technically be exempt from being point sources by Section 502 of the Act.

However, both King and Snohomish County divert their permitted point source MS4 storm water into the agricultural drainage ditch system, this removes the agricultural exemption and makes these features part of the two Counties, permitted point source MS4 system.

Since the hydrology of the floodway is not what the NRCS believed it to be because it did not conduct the necessary scientific studies, the proposed "WRP" project cannot be conducted as the NRCS has designed it. This would have been evident during the feasibility studies that the NRCS should have conducted.

It is clear that the existing project ("FPE") is causing major damage to the human element already, and the 180 degree reversal of the floodway drainage can have much more severe implications to the environment and the human element, however, no independent studies have been allowed in the "FPE" area to determine what is impacting the natural hydrology of this floodway and how severe the impact is, because this will help determine how this impact will affect significant floods in this area.

Also, the plantation style planting that includes fast growing trees of the poplar family, is no different than the poplar plantations that once covered the valley floor with the covenant that all trees would be cut down in 10 years, maximum.

However, the pulp mill these trees were destined to go to went out of business and the market for the trees evaporated, which meant that the lands these trees were on was abandoned or untended and the trees were not cut until a county program led to the removal of almost all of them. However, when they were present, the damage from flood events was dramatically more severe where these plantations block the floodway flow during flood events.

The NRCS was told this during meetings after the "FPE" was started and the citizens in the area finally found out what was going on, however, the NRCS did not pay any attention to citizen's comments, did not provide the requested scientific data and did not bother telling the citizens that the "FPE" was only one of the projects the NRCS had already COMMITTED to conduct.

There was no mention of the contiguous "WRP" project even after it was clear that the "FPE" project was causing major drainage problems in the floodway, changing the natural drainage to the north to floodwater flowing to the south onto adjoin farmland.

The NRCS has wiped its hands of the "FPE" project and had made the property owner (sponsor) liable for the damages and for the maintenance, which has never happened. The NRCS writes this off as another "success story" when in reality, it is a dismal failure and like a canary in a coal mine should have made the NRCS reconsider conducting ANY additional projects in this area.

Instead of conducting additional projects, the NRCS should use the money to fix the major problems to the human element and quite likely to the environmental element with these funds, considering the sponsor will not meet with the public, and the NRCS had kept the sponsor secret and the entire project secret, preventing any independent studies from being conducted to determine the severity of the impact to the environmental element and the human element.

The NRCS should abandon the "WRP" project and fix the "FPE" project by returning the land to its original prime farmland conditions, with the natural drainage returning to the north. However, if it insists to continue ahead, at a minimum, the NRCS will need to have scientific studies done by an independent interdisciplinary

team of scientists, have the results of this teams work independently peer reviewed, and include this in a full-fledged Environmental Impact Statement (EIS).

The internal EEs (that did not include ANY public participation) that determined there would be FNSI, however, the EEs were wrong. The NRCS cannot be trusted to make any decisions on this project since it completely ignored the requirements of NEPA from the inception phase to the completed phase, allowed no public comment, and committed its resources to purchasing the easements without any scientific feasibility studies or any public input.

The NRCS is in a committed positions right now, has one failed project adjacent to the proposed project and cannot obviously be objective considering it has flaunted its own code that it must abide by, the Department of Agriculture Title 7 CFR NEPA code.

It is time that this be turned over to the federal OMB to determine how many violations of federal code the NRCS has accumulated and to make the NRCS responsible for the federal funds it has wasted and the damages to the human element it has caused (and quite possibly to the environmental element, considering a reversal in the normal drainage in a floodway would remove habitats if aquatic species that would be dependent on this drainage, that has always been to the north and is now gone, because it has been diverted to the south).

§650.5 Environmental evaluation in planning.

(a) General. Environmental evaluation (EE) integrates environmental concerns throughout the planning, installation, and operation of NRCS assisted projects. The EE ***applies to all assistance provided by NRCS, but planning intensity, public involvement, and documentation of actions vary according to the scope of the action****. NRCS begins consideration of environmental concerns when information gathered during the environmental evaluation is used:*

(1) To identify environmental concerns that may be affected, gather baseline data, and predict effects of alternative courses of actions;

(2) To provide data to applicants for use in establishing objectives commensurate with the scope and complexity of the proposed action;

(3) To assist in the development of alternative courses of action; (40 CFR 1502.14). In NRCS assisted project actions, nonstructural, water conservation, and other alternatives that are in keeping with the Water Resources Council's Principles and Standards are considered, if appropriate.

(4) To ***perform other related investigations and analyses as needed, including economic evaluation, engineering investigations, etc.***

(5) To assist in the development of detailed plans for implementation and operation and maintenance.

(b) Procedures. NRCS's Guide for Environmental Assessment issued in March 1977 and published in the Federal Register on August 8, 1977, provides guidance for conducting an environmental evaluation. (42 FR 4012340167).

(c) Decision points. Figure 1 illustrates the decision points for compliance with NEPA in NRCS decision making.

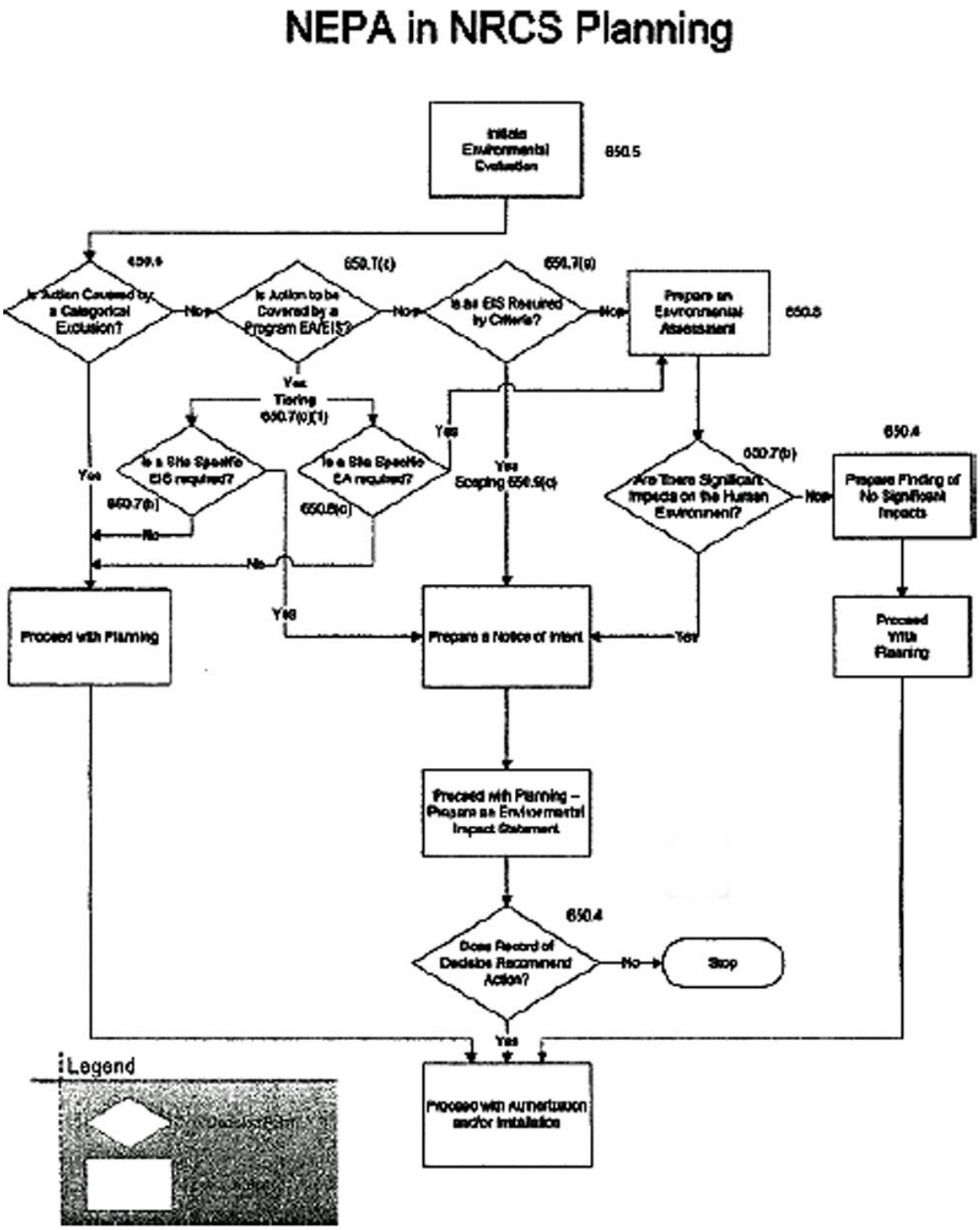
The NRCS knew these projects would be conducted in a dangerous area, the floodway of a "wild river" with no flood controls in place in the middle of a an active agricultural area with a rich agricultural heritage, where it is imperative that flood water are able to drain to the north unimpeded in the floodway and floodway fringe areas.

Any changes to the geomorphology, hydrology, or even the vegetation in the active floodway can lead to major undesirable unanticipated consequences, not only during significant floods but other hydrologic impacts are also very likely in these areas, which are considered to be the most sensitive types of projects.

These impacts have already occurred, as predicted by SNR and by the farmers in this valley, with the "FPE" causing major harm to the human element and most likely to the environmental element. The dramatic change of the floodway drainage from the historic, natural drainage to the north, to the drainage that ours after the "FPE" was built, which is to the south, removed hydrology from aquatic organisms to the north, change the hydrology for the plant communities, and is causing major flooding on prime agricultural land upstream.

The new conditions are obviously permanent because the NRCS refuses to address this problem, point the finger that the "sponsor" (the landowner) who has NEVER met with those affected by the project that was sponsored and has done nothing to maintain or to fix the drainage problem, which could seriously affect the floodway drainage during a significant flood event.

The NRCS has kept everything about the "FPE" project secret, citing the conditions of the lease, which is convenient because it means that as far as the NRCS is concerned, no one is responsible for the impacts to the environmental and human elements, even though the NRCS created the design that was used.



Item 4 above was ignored during the feasibility stage of these projects as was any public involvement, based on the figure in this section of Title 7 CFR and EIS should have been conducted for both projects, before any

leases were entered into. The NRCS ignored its own NEPA code, letting an agenda override the actual codes and common sense.

It is unclear why the NRCS felt compelled to violate the code that the Department of Agriculture wrote for NEPA compliance. The NRCS is a division of this Department and must abide by the Code of Federal Regulations, but chose not to. This is why the federal OMB should review the entire process from inception to the completion of the "FPE" and the proposed "WRP" to determine the NRCS's compliance with federal law and the use of federal funds.

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The WRP is infeasible (and the "FPE" is a dismal failure) and this would have been known before the easement was purchased if the NRCS would have conducted the appropriate required studies in this extremely dangerous area where the slightest mistake can lead to major consequences to the human and environmental elements.

§650.6 Categorical exclusions.

(a) Some NRCS programs or parts of programs do not normally create significant individual or cumulative impacts on the human environment. Therefore, an EA or EIS is not needed. These are data gathering and interpretation programs and include:

(1) Soil Survey—7 CFR part 611;

(2) Snow Survey and Water Supply Forecasts—7 CFR part 612;

(3) Plant Materials for Conservation—7 CFR part 613;

(4) Inventory and Monitoring—Catalog of Federal Domestic Assistance—10.908; and

(5) River Basin Studies under section 6 of Pub. L. 83566 as amended—7 CFR part 621.

(b) When any new action is planned under the programs identified in paragraph (a) of this section, the EE performed by the RFO is to identify extraordinary circumstances that might lead to significant individual or cumulative impacts.

Actions that have potential for significant impacts on the human environment are not categorically excluded.

(c)(1) The NRCS restoration and conservation actions and activities identified in paragraph (d) of this section are eligible for categorical exclusion and require the RFO to document a determination that a categorical exclusion applies.

Agency personnel will use the EE review process detailed in §650.5 to evaluate proposed activities for extraordinary circumstances and document the determination that the categorical exclusion applies. The extraordinary circumstances address the significance criteria provided in 40 CFR 1508.27.

(2) The extraordinary circumstances identified in paragraph (c)(1) of this section include:

(i) The proposed action cannot cause significant effects on public health or safety.

(ii) The proposed action cannot significantly affect unique characteristics of the geographic area such as proximity to historic properties or cultural resources, park lands, prime farmlands, floodplains, wetlands, wild and scenic rivers, or ecologically critical areas.

(iii) The effects of the proposed action on the quality of the human environment cannot be highly controversial.

(iv) ***The proposed action cannot have highly uncertain effects, including potential unique or unknown risks on the human environment.***

(v) ***The proposed action cannot include activities or conservation practices that establish a potential precedent for future actions with significant impacts****.*

(vi) The proposed action is known to have or reasonably cannot be expected to have potentially significant environment impacts to the quality of the human environment either individually or cumulatively over time.

(vii) The proposed action cannot cause or promote the introduction of invasive species or have a significant adverse effect on any of the following special environmental concerns not previously identified in paragraph (c)(2)(B) of this section, such as: endangered and threatened species, environmental justice communities as defined in Executive Order 12898, wetlands, other waters of the United States, wild and scenic rivers, air quality, migratory birds, and bald and golden eagles.

(viii) The proposed action will not violate Federal or other applicable law and requirements for the protection of the environment.

(3) In the absence of any extraordinary circumstances as determined through NRCS' EE review process, the activities will be able to proceed without preparation of an EA or EIS. ***Where extraordinary circumstances are determined to exist, the categorical exclusion will not apply, and the appropriate documentation for compliance with NEPA will be prepared****.*

Prior to determining that a proposed action is categorically excluded under paragraph (d) of this section, the proposed action must:

(i) Be designed to mitigate soil erosion, sedimentation, and downstream flooding;

(ii) Require disturbed areas to be vegetated with adapted species that are neither invasive nor noxious;

(iii) Be based on current Federal principals of natural stream dynamics and processes, such as those presented in the Federal Interagency Stream Corridor Restoration Working Group document, "Stream Corridor Restoration, Principles, Processes, and Practices;"

(iv) Incorporate the applicable NRCS conservation practice standards as found in the Field Office Technical Guide;

(v) Not require substantial dredging, excavation, or placement of fill; and

(vi) ***Not involve a significant risk of exposure to toxic or hazardous substances****.*

(d) The use of the following categorical exclusions for a proposed action does not waive NRCS compliance with any applicable legal requirement including, but not limited to, the National Historical Preservation Act or the Endangered Species Act. The following categorical exclusions are available for application to proposed actions provided the conditions described in paragraph (c) of this section are met:

(1) Planting appropriate herbaceous and woody vegetation, which does not include noxious weeds or invasive plants, on disturbed sites to restore and maintain the sites ecological functions and services;

(2) Removing dikes and associated appurtenances (such as culverts, pipes, valves, gates, and fencing) to allow waters to access floodplains to the extent that existed prior to the installation of such dikes and associated appurtenances;

(3) Plugging and filling excavated drainage ditches to allow hydrologic conditions to return to predrainage conditions to the extent practicable;

(4) Replacing and repairing existing culverts, grade stabilization, and water control structures and other small structures that were damaged by natural disasters where there is no new depth required and only minimal dredging, excavation, or placement of fill is required;

(5) Restoring the natural topographic features of agricultural fields that were altered by farming and ranching activities for the purpose of restoring ecological processes;

(6) Removing or relocating residential, commercial, and other public and private buildings and associated structures constructed in the 100year floodplain or within the breach inundation area of an existing dam or other flood control structure in order to restore natural hydrologic conditions of inundation or saturation, vegetation, or reduce hazards posed to public safety;

(7) Removing storm debris and sediment following a natural disaster where there is a continuing and eminent threat to public health or safety, property, and natural and cultural resources and removal is necessary to restore lands to predisaster conditions to the extent practicable. Excavation will not exceed the predisaster condition;

(8) Stabilizing stream banks and associated structures to reduce erosion through bioengineering techniques following a natural disaster to restore predisaster conditions to the extent practicable, e.g., utilization of living and nonliving plant materials in combination with natural and synthetic support materials, such as rocks, riprap, geotextiles, for slope stabilization, erosion reduction, and vegetative establishment and establishment of appropriate plant communities (bank shaping and planting, brush mattresses, log, root wad, and boulder stabilization methods);

(9) Repairing or maintenance of existing small structures or improvements (including structures and improvements utilized to restore disturbed or altered wetland, riparian, in stream, or native habitat conditions). Examples of such activities include the repair or stabilization of existing stream crossings for livestock or human passage, levees, culverts, berms, dikes, and associated appurtenances;

(10) Constructing small structures or improvements for the restoration of wetland, riparian, in stream, or native habitats. Examples of activities include installation of fences and construction of small berms, dikes, and associated water control structures;

(11) Restoring an ecosystem, fish and wildlife habitat, biotic community, or population of living resources to a determinable preimpact condition;

(12) Repairing or maintenance of existing constructed fish passageways, such as fish ladders or spawning areas impacted by natural disasters or human alteration;

(13) Repairing, maintaining, or installing fish screens to existing structures;

(14) Repairing or maintaining principal spillways and appurtenances associated with existing serviceable dams, originally constructed to NRCS standards, in order to meet current safety standards. Work will be confined to the existing footprint of the dam, and no major change in reservoir or downstream operations will result;

(15) Repairing or improving (deepening/widening/armoring) existing auxiliary/emergency spillways associated with dams, originally constructed to NRCS standards, in order to meet current safety standards. Work will be confined to the dam or abutment areas, and no major change in reservoir or downstream operation will result;

(16) Repairing embankment slope failures on structures, originally built to NRCS standards, where the work is confined to the embankment or abutment areas;

(17) Increasing the freeboard (which is the height from the auxiliary (emergency) spillway crest to the top of embankment) of an existing dam or dike, originally built to NRCS standards, by raising the top elevation in order to meet current safety and performance standards. The purpose of the safety standard and associated work is to ensure that during extreme rainfall events, flows are confined to the auxiliary/emergency spillway so that the existing structure is not overtopped which may result in a catastrophic failure. Elevating the top of the dam will not result in an increase to lake or stream levels. Work will be confined to the existing dam and abutment areas, and no major change in reservoir operations will result. Examples of work may include the addition of fill material such as earth or gravel or placement of parapet walls;

(18) Modifying existing residential, commercial, and other public and private buildings to prevent flood damages, such as elevating structures or sealing

> *basements to comply with current State safety standards and Federal performance standards;*
>
> *(19) Undertaking minor agricultural practices to maintain and restore ecological conditions in floodplains after a natural disaster or on lands impacted by human alteration. Examples of these practices include: mowing, haying, grazing, fencing, offstream watering facilities, and invasive species control which are undertaken when fish and wildlife are not breeding, nesting, rearing young, or during other sensitive timeframes;*
>
> *(20) Implementing soil control measures on existing agricultural lands, such as grade stabilization structures (pipe drops), sediment basins, terraces, grassed waterways, filter strips, riparian forest buffer, and critical area planting; and*
>
> *(21) Implementing water conservation activities on existing agricultural lands, such as minor irrigation land leveling, irrigation water conveyance (pipelines), irrigation water control structures, and various management practices.*

It is obvious that none of the NRCS projects are eligible for categorical exemptions, and it is clear that the NRCS did not even conduct a Phase I ESA or conduct standard and customary screening of the soils and ground water for potential contaminants of concern regulated by MTCA in Washington State and regulated by CERCLA on the federal level.

The NRCS did not even conduct the necessary stream reconnaissance studies by licensed geologists and hydrogeologists for geomorphological, hydrogeologic, fluvial geomorphology, and other geologic studies to determine the source of the hydrology, to determine what surface water features are actually streams and which are not, and to determine if any of these surface water features are regulated under any state or federal law, such as 33 U.S.C. §1251 et seq. and RCW 90.48, especially surface water features regulated under Section 402 of the Clean Water Act.

Instead of having the necessary interdisciplinary scientific studies conducted by impartial, non-government scientists (or any scientists), the NRCS was too agenda driven to conduct any studies that might interfere with their plan to implement these projects regardless of the risks, of the codes that are violated, and of the very likely possibility of major adverse impacts on the human element and most likely, the environmental element. Therefore, the NRCS used assumptions rather than science and this has led to the failure of the “FPE” that is known to be causing major harm to upstream prime farmland in the agricultural preservation program.

Since the cause of this failure is unknown and the NRCS does not want to know, it is unclear how it can avoid making the same mistakes in this area that is dangerous, is capable of causing widespread damage and loss of human life and livestock without the impacts to this area the NRCS has already caused and wants to create even more dangerous conditions with the cumulative effects of the proposed “WRP” which as is the case of the “FPE” violated countless sections of the Department of Agriculture NEPA code.

Additionally, the NRCS continues to go out of its way to avoid public involvement, with only one public meeting for the “WRP” that was not announced in accordance with USDA NEPA code and was not a public forum, it was Delphi facilitator led announcement on what the NRCS will do which include the presence of law enforcement to deeply instill the Delphi technique nature of what is supposed to be the opportunity for the public to comment.

There were no public meetings at all for the "FPE" until after the project was started. These meetings were coordinated by the public who demanded that the NRCS attend these meetings, however, the NRCS treated these meetings as a unnecessary nuisance to their agenda and provided models that indicated that there would be zero hydrologic impacts from the "FPE" and the NRCS refused to share the model data with the public's scientist who is a licensed geologist and specialty geologist in the state of Washington with 36 years of experience.

Regardless, the model was wrong as the public's scientist suggest it would be and the impacts to the hydrology even without river flooding are dramatic and are heavily impacting upstream protected, prime agricultural land. This strongly suggests that when a significant flood does occur, that major flood damage that would not otherwise occur will result from the "FPE" and this damage could become regional with the cumulative effects of the "WPR" and the wetland mitigation bank.

These detrimental effects could extend all of the way south to Fall City and could completely destroy Woodinville – Duvall Road and the usually submerged 124 Street bridge route due to intensified flows in the river channel due to a dramatic increase in ineffective flow flood storage which causes the flood elevations to rise and the river channel flow to accelerate.

It is a violation of the USDA NEPA code to even consider proceeding with the "WPR" when the NRCS does not know and does not care about the major impacts that the completed "FPE" has caused and the proposed "WPR" is adjacent to the failed "FPE" that continues to cause major damage to the human element and most likely to the environmental element, however, the NRCS has chosen to ignore this failure and refuses to identify what damage is being caused, why it is being caused, and fixing the damage.

Otherwise, the NRCS should be forced to return the "FPE" to its original condition and abandon the "WPR" completely. When King County sues the NRCS and the property owner (sponsor) for an ongoing water trespass, the countless violations of the USDA's own NEPA code will not bolster the NRCS's or the sponsor's case in a court of law.

In the practice of fluvial geomorphology, river hydrology, and other geologic studies, it is a known fact that any changes in the river channel, the floodway, or floodway fringe can lead to major unintended consequences that can be very unpredictable. The only thing that is predictable is that major problems will occur and this has already begun with the failed "FPE".

In a court of law, the judge will take note that there were no scientific studies, let alone interdisciplinary, independently peer reviewed studies during the feasibility study or at any time as the FDA's NEPA code requires. Virtually all citizens who live in the Snoqualmie River Valley know how dangerous the river can be, especially during significant flood events, however, the NRCS does not appreciate this fact and did not conduct the level of due diligence to insure that their project does not impact the natural drainage of the floodway and does not impact the human element and the environmental element.

The NRCS is clueless because it has chosen to be clueless and is only focusing on the agenda and the obligations it entered into without conducting all of the required studies during the feasibility study period. This will not go well in a court of law when all of the evidence of the NRCS's choice to avoid the NEPA requirements, and ignoring the basic fundamentals of the dangers associated with making any changes in a fluvial system. This especially applies to those modification that change the geomorphology, hydrology, and introduce a known source of impacts to the damages caused by flooding, the plantation style planting of rapidly growing

trees in the poplar family. Lessons have already been learned from this which is why virtually all of the poplar plantations in the valley are gone.

The NRCS is a division of the USDA, which should know that wildlife and water fowl impact agriculture dramatically, especially beavers and the 1,000s of ducks that the cumulative effects of the wetland mitigation bank and the "FPE" flooding upstream (the opposite direction of natural flow) have caused.

These impacts put the only remaining dairy in this area out of business because the pastureland was destroyed by these water fowl and beaver activity has already started in the "FPE" area because the NRCS was careful to plant vegetation known to attract beaver. These projects should never have been conducted in the middle of prime farmland in the major Snoqualmie River Valley agricultural production area where many of the farms are in the farmland preservation program.

The proposed "WRP" project should be abandoned due to potential cumulative effects and the fact that the existing "FPE" is already causing major damage to the human (and most likely environmental) element. The NRCS has tried to do everything possible to absolve itself from any liabilities associated with their projects that they design and they ignored NEPA codes to fulfill and agenda driven program that was doomed to fail, simply because all of the safeguards in the NEPA code were ignored and the actual scientific studies were never conducted, most likely because the NRCS did not want to get any findings that could stop their projects.

This document has provided numerous reasons why the "WRP" project should be abandoned and the "FPE" project should be dismantled and the land should be restored to its natural prime agricultural land conditions. Regardless, the completed "FPE" and the proposed "WPR" are not categorically exempt from NEPA or a NEPA EIS. The "FPE" should have had and EIS also, however, the NRCS determined there would be no impacts and this determination was obviously wrong.

> *§650.7 When to prepare an EIS.*
>
> *The following are categories of NRCS action used to determine whether or not an EIS is to be prepared.*
>
> *(a) **An EIS is required for**:*
>
> *(1) **Projects that include stream channel realignment or work to modify channel capacity by deepening or widening where significant aquatic or wildlife habitat exists**. The EE will determine if the channel supports significant aquatic or wildlife habitat;*
>
> *(2) Projects requiring Congressional action;*
>
> *(3) Broad Federal assistance programs administered by NRCS **when the environmental evaluation indicates there may be significant cumulative impacts on the human environment** (§650.7(e)); and*
>
> *(4) **Other major Federal actions** that **are determined after environmental evaluation to affect significantly the quality of the human environment** (§650.7(b)). **If it is difficult to determine whether there is a significant impact on the human environment,** it may be necessary to complete the EE and prepare an EA in order to decide if an EIS is required.*

(b) The RFO is to determine the need for an EIS for each action, program, or regulation. ***An environmental evaluation, using a systematic interdisciplinary analysis and evaluation of data and information responding to the five provisions of Section*** *102(2)(C) of NEPA, will assist the RFO in* ***deciding if the action requires the preparation of an EIS. In analyzing and evaluating environmental concerns, the RFO will answer the following questions****:*

(1) Environmental impact. ***Will the proposed action significantly affect the quality of the human environment*** *(40 CFR 1508.14)? For example, will it significantly alter or destroy valuable wetlands,* ***important farmlands****,* ***cultural resources, or threatened and endangered species****? Will it affect* ***social values, water quality, fish and wildlife habitats****, or wilderness and scenic areas?*

(2) Adverse environmental effects that cannot be avoided. What are the important environmental amenities that would be lost if the proposed action were implemented?

(3) Alternatives. ***Are there alternatives that would achieve the planning objectives but avoid adverse environmental effects****?*

(4) Short-term uses versus long term productivity. ***Will the proposed actions, in combination with other actions, sacrifice the enhancement of significant long term productivity as a tradeoff for short term uses****?*

(5) Commitment of resources. ***Will the proposed action irreversibly and irretrievably commit the use of resources*** *such as important farmlands, wetlands, and fish and wildlife habitat?*

(c) Criteria for determining the need for a program EIS:

(1) A program EIS is required if the environmental evaluation reveals that actions carried out under the program have individually insignificant but cumulatively significant environmental impacts.

(2) A project EIS, in lieu of a program EIS, ***is required if the environmental evaluation reveals that actions carried out under the program will have both individually and cumulatively significant environmental impacts****. (7 CFR Parts 620 through 623 and 640 through 643).*

(d) The RFO, through the process of tiering, is to determine if a site specific EA or EIS is required for an individually significant action that is included in a program EIS.

As SNR's comments on the EA in this document indicate, the NRCS has not demonstrated in any way that there will not be major impacts to the human and environment elements. The fact that the adjacent "FPE" was determined to have no significant impact in an EE and that this EE determination was completely incorrect is proof that the NRCS cannot make determinations on impacts associated with the existing and proposed projects or their cumulative effects with each other. Additionally, the NRCS did not factor in cumulative effects NRCS project in the EA nor did it include other cumulative effects such as the wetland mitigation bank that

has an enormous Permitted Point Source MS4 detention facility that fills most of the western portion of the Valley flood (the floodway and floodway fringe).

The NRCS did not factor in the removal of the dam at Snoqualmie Falls under the Department of Energy, which did not produce an EA or an EIS as a cumulative effect nor are other "restoration projects" that have been or will be conducted in the Snoqualmie River floodway by NGOs and by the different Conservation Districts.

The proposed "WRP" project includes numerous hydrologic, geomorphologic, and structural changes to the existing prime farmland with NO scientific studies ever being conducted to determine the potential impacts to the human element and the environmental element. The NRCS did not even retain the services of a licensed specialty geologist to conduct stream reconnaissance studies to find out which features are actually streams and which are not and may actually be point sources.

The NRCS has copies of the 1871 Land Office maps for this area and can see that there was only one small stream in this area that originated in the southern portions of a cranberry marsh. There was no slough, there was one small pond, which may have been a beaver pond. The entire valley floor is filled with agricultural drainage ditches and subsurface drainage systems.

These systems were a combination of excavated and natural relict features located on the Valley Floor just as the permitted point source MS4 systems on the western plateau of the Snoqualmie River Valley and the road side ditches on West Snoqualmie Valley Road NE Duvall Washington incorporate manmade and natural drainage features.

It is imperative to the "WRP" that characteristics of the surface water be identified and classified using the fluvial geomorphologic classification system if they are natural and if not, to determine the regulatory status of the water that is in the surface water conveyances that are not natural. P

art of the "WRP" project includes filling "stream channels", creating new stream channels, blocking drainageways, changing the characteristics of the natural geomorphology of the area by removing relict abandoned Snoqualmie River channels (as swales), creating obstructions in the floodway with large woody debris, and by planting more plantation style trees.

The NRCS permanently and irrevocably removed prime farmland from production in an area that is completely agricultural (and zoned as such by the County) for the "FPE" which according to the NRCS EE, there would be NO adverse effects to the environmental or human elements.

However, as discussed throughout this document, the "FPE" is a dismal failure and it is causing major damage to upstream prime farmland in the agricultural preservation area of King County. In fact King County sent numerous letters of complaint to the NRCS and all of these went unheeded by the NRCS. King County has already invested over $150,000 to try to address the flooding caused by the "FPE" which has permanently changed the direction of natural drainage(by but not limited to planting trees on top of existing drain tiles in the FPE causing the tiles to not function) in the portion of the floodway closest to the active channel.

Now the NRCS wants to complete another, more ambitious project on the prime agricultural land that adjoins the "FPE" to the north; still without the NEPA required scientific and other studies that are required to determine what the potential impacts would be and to determine if the project is even feasible and if this proposed project will cause major impacts to the prime agricultural land in this area, loss of life, loss of livestock, the destruction

of infrastructure, and impact the citizens upriver that live in or near the river's floodways and even the base flood elevation for the 1% flood event.

The base flood elevation is an approximation made by the FEMA after King County summited challenge maps to the proposed flood insurance rate maps. This is not scientifically determined by the FEMA because this is not the purpose of the Flood Insurance Rate Maps, the purpose is actuarial, to determine the potential risks of flood damage to assess how much flood insurance will cost and to create exclusion areas where no flood insurance will be issued (this includes the active floodways and floodway fringe).

There is NO statistically valid data on what a 1% flood event or storm is because there is less than 130 years of data and these data only apply to certain areas of the state. In reality there is less than 80 years of data for precipitation records that were officially collected in the Puget Lowlands.

The flood data is somewhat documented for approximately 150 years, however, it is impossible to know that a 1% event is without having sufficient data, which would take 100s of years to collect before even a marginal statistical analysis could be conducted.

The flood heights are known (the flow rate data is less than 80 years old) on the Snoqualmie River since about the1880s, but these are not listed as percentage of 1% floods they are listed as the top ten flood elevations. The 2009 flood event was near the top of the list of this top ten.

There has been no significant river flooding since the 2009 event and this event was much more severe than the weather or other typical parameters used for predicting flood severity predicted. Part of the reason for this is that this was the first significant storm event after the dam was removed by the Department of Energy at the Snoqualmie Falls power generating facility.

It is scientifically unknown what a 1% base flood elevation is, however ALL structures, critter pads, and infrastructure is placed at elevations above the highest known flood elevation. If any project conducted by anyone in the Snoqualmie River floodway and flood fringe causes the height of the flood to exceed the highest known flood elevation, there would be major damage, potential loss of life, loss of livestock and loss of infrastructures (and homes).

The NRCS is prohibited from proposing any project that will impact the human or environmental elements significantly enough to cause major impacts to the human element and the environmental element. The NRCS has zero scientific studies, let alone the interdisciplinary studies that the NEPA code requires to make any determinations on the potential impacts its proposed actions will create.

However, the NRCS should realize that their "FPE" is a good indicator on the NRCS's ability to determine what impacts their actions will create. The EE says no impacts, but in reality, this project has created major impacts that cannot be fully assessed because access to this failed NRCS project is prohibited and all information has been kept secret.

It is impossible to assess the cumulative effects that the proposed project would have on the flood elevations, river flow velocity in the main channel, and/or other localized effects that could include a change in the main channel fluvial geomorphology, which could create channel meander, and with increase river flow velocity, this typically means the channel will try to straighten at the point where it now crosses from the east side of the valley floor to the west side.

This would be a major catastrophe that could easily result in the loss of human life, property, and infrastructure. The reason these cumulative effects cannot be determined is due to the lack of scientific data because the NRCS never had the required scientific studies conducted.

Additionally, SNR's studies on the permitted point source MS4 storm water diverted into the agricultural drainage ditch system, including Pearson Eddy Creek are incomplete and did not identify all of the potential source of permitted point source MS4 storm water or how much goes where in the agricultural drainage system which is mostly interconnected.

It is known that a significant amount goes into the Pearson Eddy slough which the "WRP" proposes to modify and create a backwatering effect into the slough from the river, allowing endangered species to enter a permitted point source MS4 conveyance system.

Since the proposed action will significantly affect the quality of the human environment (40 CFR 1508.14), because the first phase of these projects is completed (the FPE) and it is already caused a permanent reversal in the drainage in the floodway, with environmental impacts unknown but likely. There are known major impacts to prime farmland and secondary impacts from the monoculture of water fowl created by cumulative effects of the wetland mitigation bank, which actually put the only dairy in this area of the valley (that has been operated for at least 3 generations by the same family) out of business because the water fowl (ducks exclusively) devastated the pastureland.

The important prime farmlands are cultural resources, that date back to the late 1850s and are preserved for posterity in the Dougherty house and homestead are preserved and are cultural resources recognized by the City of Duvall. It is Dougherty that was one of the pioneering farmers in this area that organized the construction of the agricultural ditch system that includes the Pearson Eddy Slough.

This effects social values and the fish and wildlife habitat in the floodway are where the "WRP" is proposed, which must be affected because the normal drainage in this area is to the north which aquatic life would have adapted to, this drainage no longer exists because it has irreversibly been diverted to the south when the "FPE" was constructed and is now flooding prime farmland.

The NRCS is well aware of the fact that its EE determination was dead wrong and that their project failed because it violated the USDA's own NEPA requirements. The NRCS is aware of the major impacts being caused by the flooding of the prime farmland to the south, but it claims no responsibility and points its finger at the "sponsor", the person that owns the property even though it was the NRCS that designed the project that failed and it was the NRCS that failed to comply the USDA's own NEPA requirements.

The NRCS has two choices, to abandon the "WRP" project or to conduct the necessary independent, interdisciplinary scientific studies that are independently peer reviewed to product all of the required scientific data to be used in an environmental impact statement that the NRCS must prepare before it can proceed with the "WRP" project, if it can demonstrate that there will be no significant impacts, although the NRCS has a poor track record of being correct in these determinations based on the dismal failure of the "FPE" project.

§650.13 Review and comment.

In addition to the requirements of 40 CFR 1503, 1506.10 and 1506.11, NRCS will take the following steps in distributing EIS's for review and comment:

(a) Draft EIS's. Five copies of the draft EIS are to be filed by the RFO with the Office of Environmental Review, A104, Environmental Protection Agency (EPA), Washington, D.C. At the same time, the RFO is to send copies of the draft EIS to the following:

(1) Other Federal agencies. The regional office of EPA and other agencies that have jurisdiction by law or special expertise with respect to any environmental effect, other Federal agencies (including appropriate field and regional offices), and affected Indian tribes.

(2) State and local agencies. OMB Circular No. A95 (Revised), through its system of State and area wide clearinghouses, provides a means for obtaining the views of State and local environmental agencies that can assist in the preparation and review of EIS's

(3) Organizations, groups, and individuals. A copy of the draft EIS is to be sent to the appropriate official of each organization or group and each individual of the interested public (§650.9(d)(3)(i)) and to others as requested. A charge may be made for multiple copy requests.

(b) Time period for comment. The time period for review ends 45 days after the date EPA publishes the notice of public availability of the draft in the Federal Register. A 15 day extension of time for review and comment is to be considered by the RFO when such requests are submitted in writing. If neither comments nor a request for an extension is received at the end of the 45 day period, it is to be presumed that the agency or party from whom comments were requested has no comments to make.

*(c) News releases. **In addition to the notice of availability** published in the Federal Register by EPA, the RFO is to announce the availability of the draft EIS in one or more newspapers serving the area.*

(d) Revising a draft EIS. If significant changes in the proposed action are made as a result of comments on the draft EIS, a revised draft EIS may be necessary. The revised draft EIS is to be recirculated for comment in the same manner as a draft EIS.

(e) Final EIS's. After the review period for the draft EIS, the RFO is to prepare a final EIS, making adjustments where necessary by taking into consideration and responding to significant comments and opposing viewpoints received on the draft EIS. The following steps are to be taken in filing and distributing the final EIS:

(1) Letters of comment are to be appended to the final EIS. If numerous repetitive responses are received, summaries of the repetitive comments and a list of the groups or individuals who commented may be appended in lieu of the actual letter.

(2) The RFO is to send five copies of the final EIS to EPA's Office of Environmental Review, and a copy of the final EIS to each State and Federal agency, organization, group, and individual who commented on the draft EIS.

> *Single copy requests for copies of the final EIS will be provided without charge. A charge may be made for multiple copy requests.*
>
> *(3) During the 30day administrative action period noted in §650.12(c), NRCS will make its final EIS available to the public (40 CFR 1506.10).*
>
> *(f) Supplements to EIS's. (1) If NRCS determines that it is necessary to clarify or amplify a point of concern raised after the final EIS is filed, appropriate clarification or amplification is to be sent to EPA with information copies furnished to those who received copies of the final EIS. The waiting periods do not apply.*
>
> *(2) If the RFO determines that the final EIS or supplement to the original EIS previously filed becomes inadequate because of a major change in the plan for the proposed action that significantly affects the quality of the human environment,* ***a new EIS is to be prepared, filed, and distributed as described in this section.***

Based on the USDA's own NEPA code it is clear that an EIS is required, although it would probably be better for the NRCS to abandon the "WRP" project considering the NRCS violated numerous provisions of its own NEPA CFR, it made an incorrect EE determination on the "FPE" because the NRCS refused to follow the requirements of the USDAs NEPA CFR.

The "FPE" project violated every aspect of the USDAs own NEPA requirements in the CFR. The NRCS had absolutely no scientific data from the interdisciplinary scientific studies that are required by NEPA before the project is even considered (a feasibility study).

The "FPE" continues to cause major impacts to the human element and a complete reversal of the drainage in a floodway is considered to be a major impact that is permanent as long as the "FPE" is present, the NRCS and the Sponsor refuse to accept responsibility, and the NRCS keeps this project secret and inaccessible to independent scientists and engineers to find out what went wrong.

The cumulative effects were not ascertained in the EA and cannot be ascertained until the required scientific studies are conducted, nor can the potential impacts to endangered species, additional major impacts to the human element be ascertained, because all are unknown at this time due to the lack of scientific data and engineering analysis of the actual "FPE".

The NRCS does not even know the regulatory status of the surface water it will be making major changes to and will be creating, for the first time in the know history of this area, a passageway for endangered species to enter the Pearson Eddy Slough and this area of the Snoqualmie River floodway (other than during major flood events). However, the NRCS did not conduct any environmental studies on the soils, ground water or on the surface water to determine if these are impacted with COCs that can harm endangered species.

As previously discussed, these agricultural lands have been in production ranging from the 1850s to the 1950s and as the age of modern agriculture began in the 1930s and continued to progress, a wide range of agricultural pesticides, herbicides, soil amenities, fertilizers (including biosolids starting in the 1960s), and the dairy farm management of dairy farm operations that included manure ponds that were and still area used for land application to the pasture land.

The NRCS should read up on the evolution of agricultural pesticides and herbicides that were used extensively throughout the United States and should be common knowledge to the USDA. Many of these pesticides and even some herbicides can have an incredibly long persistence in the soils and even in the ground water.

Lead arsenate, a pesticide, still plagues agricultural crops that accumulate arsenic in the actual crop. Imagine what the levels in the soil and or ground water must be. Many of these pesticides used different formulations of arsenic compounds, lead, copper, zinc, and persistent chemicals such as DDT, Chlordane, and even more toxic persistent pesticides.

Without knowing if these COCs are in the soils and/or ground water the NRCS cannot determine if there will be environmental impacts to wildlife and aquatic life, including endangered species. Additionally, until the NRCS knows which conveyances in this areas are transporting permitted point source MS4 storm water, the NRCS cannot proceed with its proposed plans for the "WRP" because it cannot manage ANY permitted point source MS4 storm water and even point source flow that is not permitted would be considered to be a potential threat to the survival of endangered species.

The NRCS has a lot of catching up to do just to comply with the sections of its own NEPA code that it ignored and did not comply with. The scientific studies, including the soil and ground water sampling should have all been conducted as part of the feasibility studies, including the scientific studies that would identify what the surface water features in this area really are (regulatorily and by contents).

Based on the NRC's NEPA code that it is required to follow and the NRCS has chosen not to follow, the NRCS must follow it now, the NRCS must conduct ALL of the necessary scientific studies to be able to make the determinations regarding the potential impacts and the known impacts (such as those from the "PFE").

These must be conducted both on a site specific basis and a project specific basis (and an area wide basis) including cumulative effects from all activities conducted in the Snoqualmie River channel, floodway, and floodway fringe; including the impacts from the Department of Energy project that removed the dam on the Snoqualmie Falls, the impacts created by the local conservation districts, and those conducted by the Counties and State.

Based on the NRCS's track record for determining if significant impacts will occur and their failure to adhere to their own code, and their apparent agenda driven need to complete these projects regardless of the unintended consequences and the severity of these consequences, all of the scientific and engineering studies should be peer reviewed by persons with no interests in the projects.

It is clear that the NRCS cannot be objective, unbiased, and goal oriented since it has already committed to conduct the project by purchasing the lease without ever conducting any feasibility studies at a level that would insure the success of a project or would indicate that the proposed project is infeasible.

Based on SNR's analysis of the EA and of the NRCS's history with the projects in this area including the failed ""FPE" project, the NRCS's failure to meet its own regulatory requirements in Title 7 CFR, the USDA's own NEPA requirements, and based on the requirements in Part 650 of Title 7 CFR for an EIS being required, it is obvious that an EIS must be prepared and the required scientific and engineering studies be conducted to determine if the proposed project is even feasible, to determine what went wrong with the "PFE".

To be able to determine the environmental and human element impacts with a reasonable level of certainty, on a site level, project level, and on an area wide level including all potential cumulative effects, including the

predictions of how much additional pollution generating impervious surfaces will be added to the western plateau of the Snoqualmie River Valley and how much additions permitted point source MS4 storm water will be diverted to the agricultural drainage system, including the Person Eddy Slough

There are countless factors that must be considered and a considerable amount of scientific data must be generated before any analysis can be conducted. It is clear that by not adhering to the requirements of NEPA in part 650 of Title 7 CFR, the NRCS is way behind the curve on being able to make any determinations or even to be able to complete preliminary designs. And with the stigma of the "PFE" being unaddressed, it will be difficult to determine what the cumulative effects will be or even what impacts will be with the permanent reversal of drainage in the near channel floodway way area.

As previously discussed any work in a "wild river" channel, floodway, and floodway is very dangerous and can lead to major consequences. When you are dealing with significant flood volumes ranging between 80,000 and 100,000 cubic feet per second and when the entire valley flood is inundated with flood waters that even spill over the main highway (SR 203), flood Cherry Valley, and overtop the only remaining access road to the eastern side of the valley, Duvall – Woodinville Road which is a lifeline ad is the only way in or out of the eastern side of the Snoqualmie River Valley and the City of Duvall, Washington.

When any activities are conducted on or in the floodways of this dangerous river, you need to make very sure that any alterations that are conducted are based on a lot of sound, statistically significant scientific data and independent engineering analysis that is independently peer reviewed. This does not even include the potential impacts to endangered species, the loss of habitats, and the loss of prime farmland that is already occurring from the "FPE" project.

It is clear the NRCS must either abandon the "WRP" project or prepare the EIS with the required supporting scientific data.

If you have any questions, please contact me at your convenience (206-291-5556)

Sincerely,
SNR COMPANY

Steven F. Neugebauer
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