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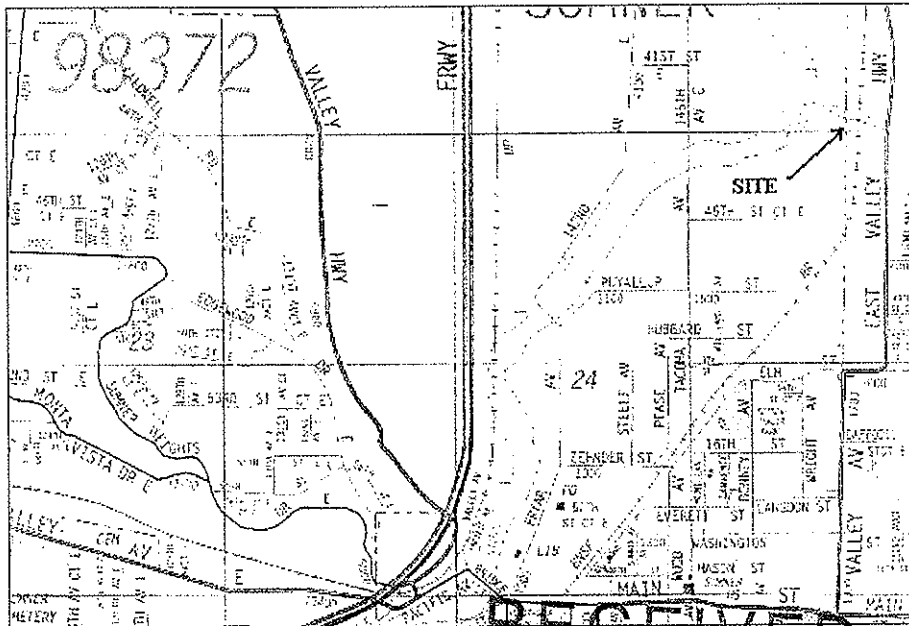
March 24, 2009

Robert Holler
Fireweed Investments, LLC
c/o Investco Financial Corporation
1302 Puyallup Street
Sumner, Washington 98390

RE: Habitat Management Plan – Fireweed Parcel #0520183021
SWC Job #A8-192

Dear Robert,

This report is intended to address the City of Sumner requirement for a Wildlife Habitat Study for your industrial grading project located on Parcel #0520183021 located off 45th Street Ct. in the City of Sumner Washington (the site). Specifically, the site is an irregularly shaped parcel of agricultural land located along the west side of the Burlington Northern tracks and straddling Salmon Creek in a portion of the SE ¼ and the NE ¼ of Section 13, Township 20 North, Range 4 East of the Willamette Meridian in Pierce County, Washington.



JUN 04 2010

CITY OF SUMNER

Rev 2 Addendum 3/5 PLN2004-00123

1.0 Introduction

The applicant proposes to construct a road crossing over Salmon Creek in order to obtain access to the southern portion of the property for future development. The proposed road crossing will be placed in one of the narrower portions of the stream just west of the historic road crossing. The historic crossing is located near the northeast corner of the site that has washed away leaving only a broken culvert and scattered debris in the channel. There is no other legal access to this portion of the property.

2.0 Habitat Description

Existing Environmental Conditions

3.1.1 Biota

The site has been historically altered for use as an agricultural field on the south and a turf farm on the north. The site is bordered by the REI warehouse along its western boundary and an industrial plat known as the Maestro Fireweed Plat, the Burlington Northern Railroad tracks along its south and east boundary. Salmon Creek passes through the center of the property draining from east to west.

Other than an area approximately 100' wide of scattered large cottonwoods along the south side of Salmon Creek, and a narrow band of shrub vegetation along the north side of the creek, there is no native habitat left on the site.

The area to the south of Salmon Creek is a plowed agricultural field with thickets of blackberry along its eastern perimeter and the railroad tracks. No vegetation was observed within this area during our site visit as it was disked at the time.

The site currently offers little habitat to any wildlife in the area. The White River borders the west side of the site, old turf farm currently under development as industrial property (Mastro/Fireweed) borders the south side of the site, a railroad track borders the east side of the site, and agricultural land borders the north side of the site.

The site has one feature which has habitat for wildlife, Salmon Creek (also known as Strawberry Creek). To the west of the site approximately 800' is the White River. The Habitat Management Plan requires review of habitat features within 1,000' of a site.

Salmon Creek is a perennial salmonid bearing water passing through the site from east to west. This stream supports numerous salmonid species including cutthroat trout, rainbow trout, fall chum salmon, coho salmon, and pink salmon. Additionally other non-salmonid species utilize this creek. Salmon Creek originates at a spring located several miles southeast of the site. Salmon Creek enters the site under a railroad bridge. A stormwater outfall from a large industrial park discharges into the stream just upstream and east of

the railroad tracks off-site. Heavily discolored water, possibly indicative of anerobic conditions in this water is evident at the outfall. The stream flows under the railroad bridge onto the site. Here the stream passes through and around several washed out culvert sections and old debris from the previous road crossing. A drainage ditch draining south along the west side of the railroad tracks discharges into the north bank of the stream at this point. He stream then passes in a relatively natural meanders through the site with several other drainage ditches and drain tiles draining into the channel from the north.

The White River is a salmonid bearing perennial stream that has been historically placed in well defined ditch-like banks through the Valley. According to the *Washington State Department Fisheries Catalog of Washington Streams and Salmon Utilization*, the White River contains Chinook, coho, pink salmon and chum salmon. The White River also supports resident cutthroat trout as well as other fish species. As previously stated, the White River is located approximately 800' west of the site. Salmon Creek discharges into the White River.

Priority Habitat Data Search

We conducted a review of the *Washington Department of Fish and Wildlife Priority Habitat Maps* for the site. Salmon Creek is identified as PHS Polygon #22 (902556) and consists of the "Salmon Creek Riparian Zone". This is identified by WDFW Biologist Don Nauer as "*steelhead and trout spawning and rearing tributary in lower White River with some associated riparian wetlands*". This Priority habitat includes the entire length of Salmon Creek as far south as SR 410.

Additionally, a wetland is identified on the east side (opposite from site) of the railroad tracks. The mapped wetland corresponds the existing off-site Fred Meyer mitigation site.

The only other identified habitat features listed within 1,000' of the site is the White River, identified as "priority anadromous fish presence" as well as "priority resident fish presence". No other listed species or priority habitats were identified.

The following is a review of potential species using *Salmon Creek* on-site;

Coho salmon

Currently this species is not listed as endangered, although it is listed as a Federal Species of Concern in Puget Sound, and a State candidate species. This species is known to use Salmon Creek.

Chum salmon

Currently this species is listed as Federally Threatened, and as a State Candidate species for listing. As with Chinook salmon, these species are known to use tributaries of Puget Sound. This species is known to use *Salmon Creek*.

Pink Salmon

Currently this species is not listed as endangered, although it may be in the future. This species is known to use Salmon Creek.

Cutthroat trout

Currently this species has no special listing. This species is known to use Salmon Creek.

Steelhead trout

Steelhead trout have been listed by National Marine Fisheries as Threatened. They are listed as a Washington State Candidate species. Steelhead trout are known to utilize Salmon Creek for spawning and rearing habitat.

The following is a review of potential species using the ***White River*** near the site;

Chinook Salmon

The National Marine Fisheries Service (NWFS) has identified the Chinook salmon (*Onchorhynchus tshawytscha*) as a threatened species. NMSF has listed Puget Sound Chinook as *threatened* since March of 1999. The identified ESU includes all naturally spawning populations of Chinook from rivers and streams flowing into Puget Sound. Critical habitat includes all marine areas accessible to Chinook salmon in Puget Sound.

Chinook salmon are the largest pacific salmon averaging 36" in length and 18-22 pounds. Chinook salmon spawn in main stem rivers and large streams. Ocean type chino salmon leave the river environment entering the estuarine and marine environments in their first year of life. These fish typically spend most of their adult life in coastal waters and return to their natal rivers in the fall to spawn.

According to the WDFW mapping of the White River, Chinook salmon have been observed in the White River most likely utilizing the reach along the site as a travel corridor and possibly for potential spawning areas.

Bull trout

There is little information about the abundance and life history of bull trout in Puget Sound and its tributaries. Bull trout are presumed present in numerous coastal rivers and streams. The Puget Sound coastal bull trout (*Salvelinus confluentus*) was listed as threatened in October of 1999. This listing includes all drainages north of the Columbia River, including tributaries of Puget Sound. Four life stage history strategies are used by Bull trout, although only the anadromous form would occur in Puget Sound. Anadromous bull trout spawn in freshwater and then migrate to salt water for an unknown period of time. Bull trout are known to opportunistically feed on juvenile salmon during downstream migration and will migrate to near shore habitats in salt water and estuaries to prey on juvenile salmon in the spring.

Bull trout are not known to use this area of the White River. However, little is known about their distribution in this river and it assumed they may be present.

Coho salmon

Currently this species is not listed as endangered, although it is listed as a Federal Species of Concern in Puget Sound, and a State candidate species. This species is known to use the White River.

Chum salmon

Currently this species is listed as Federally Threatened, and as a State Candidate species for listing. As with Chinook salmon, these species are known to use tributaries of Puget Sound. This species is known to use the White River.

Pink Salmon

Currently this species is not listed as endangered, although it may be in the future. This species is known to use the White River.

Field Observations

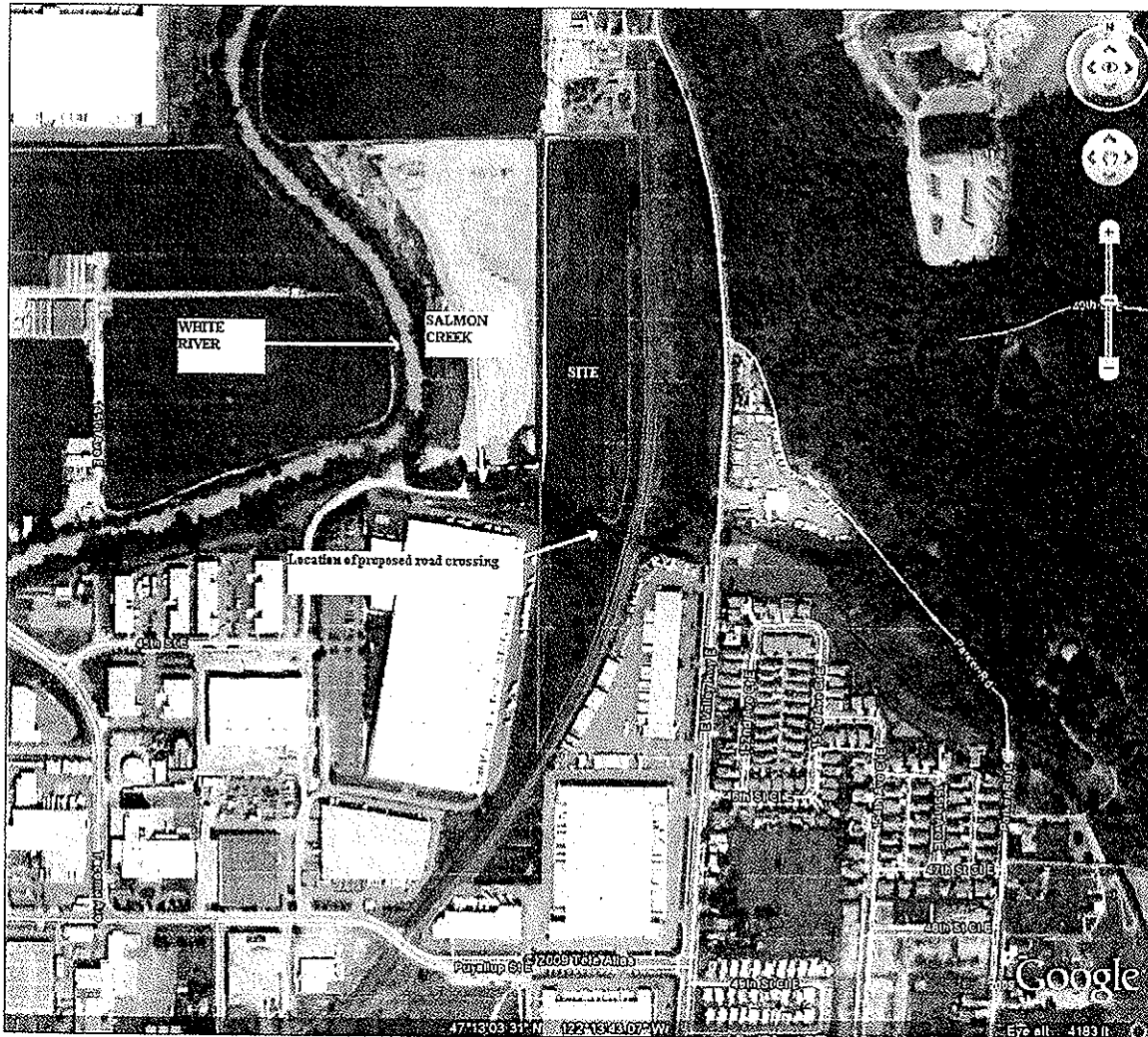
As previously described, the north end of the site consists of an active turf farm which during previous visits to the site in 2006-2007, had nearly 100% disturbed soils as all turf had been recently removed. No vegetation except that along the north bank of Salmon Creek is present in this area. On the south side of Salmon Creek an open forested canopy is present dominated by several large black cottonwoods. This area has an understory of stinging nettle and blackberry which has been regularly mowed. Several old agricultural garbage dumpsites were found along the south edge of this forested area within a dry linear depression.

South of the forested area is a large, plowed agricultural field. No vegetation of any sort was noted within this area as it had been recently mowed.

The railroad tracks along the site are busy and create substantial noise and disturbance. This represents somewhat of a barrier and danger to wildlife in the area. On previous visits to the site several species of wildlife were observed to have been killed (hit) by trains including a great blue heron observed laying on the rail bed. The site in general, with the exception of Salmon Creek, is low in habitat quality with no cover, no habitat features and no special characteristics which would make it valuable to wildlife with the exception of the forested area along Salmon Creek.

No sensitive species were noted on the site during several site visits in March, October and December of 2008. The banks of Salmon Creek have a narrow band of woody vegetation on the north consisting primarily of willows, blackberry and several immature cottonwoods, and a larger band (approximately 100' wide) on the south. Salmon Creek is the only habitat feature on the site. Although no state or federally listed species were

observed, it is probable that trees within the buffer of the creek are used as perch trees by various birds for hunting in the turf and agricultural fields as well as the creek itself. These trees also provide an important function in shading this waterbody keeping waters cool which benefit salmonid species utilizing the creek. The trees also provide an important source of organic matter and wood recruitment to the creek to provide substrate and forage for streambed invertebrates.



Proposed Project & Impacts

The proposed project is the construction of a road from the northern end of the site onto the southern end of the site over Salmon Creek. As previously described this is being placed in the general location of a former road crossing which remnants of can be seen within the creek bed. However, the new road will be slightly to the west to cross at a narrower portion of the creek and at a location where soils are suitable for the crossing structure. A site visit was conducted with WDFW biologist Gina Piazza to review the

requirements for the crossing. As is typical of a project of this sort, a bottomless fish passable culvert is required by WDFW.

The proposed crossing will utilize a 26' long x 8' 7" single radius arch pipe culvert placed upon footing located outside the ordinary high water mark of the creek. This road crossing will impact 7,365sf of stream buffer.

Proposed Mitigation

As part of the new culvert placement over Salmon Creek, the old sections of culvert and road debris will be removed from the creek. The area of stream buffer impacted by the road crossing is 7,140sf. To compensate for this 7,533sf of additional buffer will be added to the existing buffer.


As is typically required for habitat areas that have been reduced in function, the buffer of Salmon Creek on the site is proposed to be enhanced with scattered tree plantings to increase the overall function of the stream. These plantings will benefit the species using Salmon Creek previously described by increasing the shading of the creek resulting in cooler water. The installation of trees will also increase the source of organic debris and wood recruitment to the stream and stream buffer areas, as well as providing a barrier to intrusion into the stream area.

Conclusion

It is our conclusion the proposed project with the new road crossing and buffer enhancement will have minimal effect or impacts on any species or habitat on the site or near the site. The proposed enhancement will improve the riparian corridor and habitat for species utilizing this corridor.

If you have any questions or require any additional information please feel free to contact me at (253) 859-0515 or at esewall@sewallwc.com.

Sincerely,
Sewall Wetland Consulting Inc.



Ed Sewall
Senior Biologist

3.0 References

King County Fish Distribution Maps in WRIA 9, May 2000

US Fish and Wildlife Threatened and Endangered Species Website

Rodrick E. and R. Mimer. 1991. Management recommendation for Washington's priority habitats and species. Washington Department of Fisheries, Olympia, Washington.

Simenstad, C. A., K. L. Fresh, and E. O. Salo. 1982. The role of Puget Sound and Washington coastal estuaries in the life history of Pacific Salmon: An unappreciated function. In: V. S. Kennedy Estuarine Comparisons Academic Press, New York, NY. Pages 343-364.

USFWS. 1999a. Endangered and Threatened Wildlife and Plants; Determination of Threatened Status for Bull Trout in the Coterminous United States; Final Rule. Federal Register 64: 58910-
USFWS. 2001.

1992 Washington State Salmon and Steelhead Stock Inventory, Appendix One Puget Sound Stocks. Prepared by Washington Department of Fisheries, Washington Department of Wildlife, and Western Washington Treaty Indian Tribes, Olympia, Washington.
WDFW. 1998.

1998 Washington Salmonid Stock Inventory, Appendix Bull Trout and Dolly Varden. Prepared by Washington Department of Fish and Wildlife, Olympia, Washington.
WDFW. 2000a.

2000 Washington Salmonid Stock Inventory, Appendix Coastal Cutthroat. Prepared by Washington Department of Fish and Wildlife, Olympia, Washington.
WDFW. 2000b.



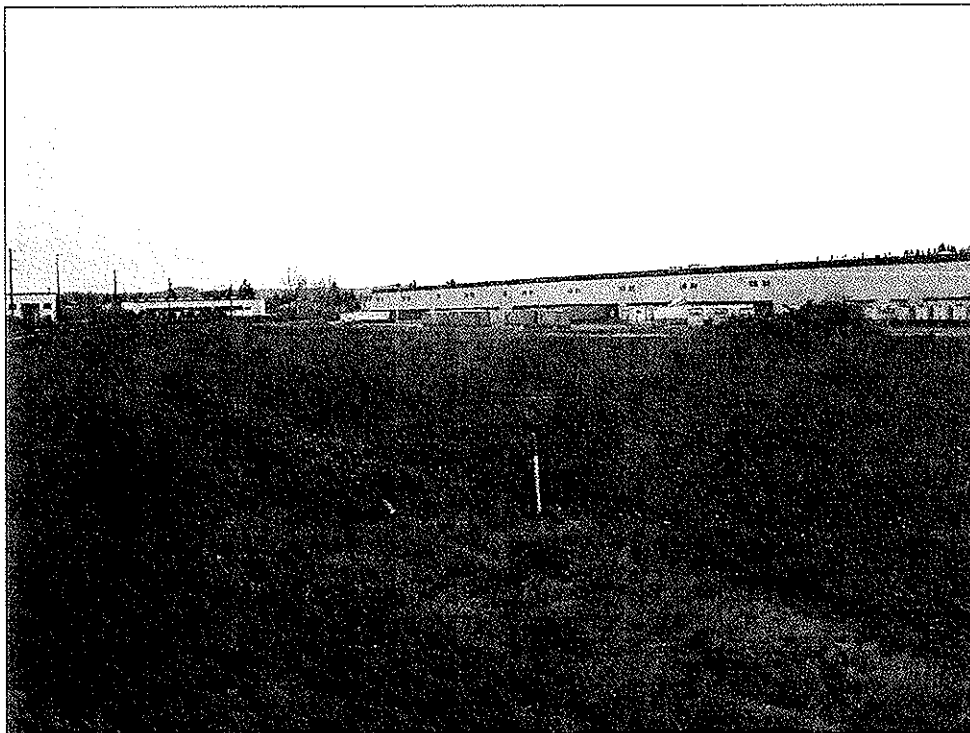
Above: photograph looking west from railroad tracks at Salmon Creek. Note old culvert sections and debris in channel.



Above: Area of large cottonwoods along south side of Salmon Creek on-site. REI warehouse visible on upper left side of photograph.



Above and Below: Two views of south side of site.





Above: View looking south along railroad tracks. Site is agricultural field on right side of photograph.



Above and Below: The turf farm portion of the site north of Salmon Creek as viewed in February of 2006. Railroad tracks visible on right side of upper photograph.

