Appendix A: Distribution List

CASCADE WATER ALLIANCE
CASCADE REGIONAL WATER SUPPLY SYSTEM
TACOMA–CASCADE PIPELINE

NOTICE OF AVAILABILITY
FINAL ENVIRONMENTAL IMPACT STATEMENT

DISTRIBUTION LIST

CASCADE WATER ALLIANCE MEMBERS

City of Bellevue
Covington Water District
City of Issaquah
City of Kirkland
City of Redmond
Sammamish Plateau Water & Sewer District
Skyway Water & Sewer District
City of Tukwila

LOCAL GOVERNMENTS

King County DNR/P – Water Policy
King County DNR/P – Parks
King County Dept. of Transportation
King County DDES
King County Metro Transit*
Seattle and King County Public Health
City of Auburn
City of Black Diamond*
City of Covington
City of Kent
City of Maple Valley*
City of Renton
City of Newcastle
City of Bellevue
City of Issaquah
Pierce County Planning and Land Services

STATE OF WASHINGTON

Department of Ecology SEPA Register
Department of Ecology Northwest Regional Office
Department of Health
Department of Archaeology and Historic Preservation
Department of Natural Resources
Department of Transportation
Department of Fish and Wildlife

STATE OF WASHINGTON (continued)

Parks and Recreation Commission
Utilities and Transportation Commission
Puget Sound Clean Air Agency

FEDERAL AGENCIES

U.S. Army Corps of Engineers, Seattle District
Bureau of Indian Affairs
U.S. Environmental Protection Agency, Region 10
Federal Emergency Management Agency, Region 10
U.S. Fish and Wildlife Service
U.S. Geological Survey
NOAA Fisheries - National Marine Fisheries Service
Natural Resource Conservation Services
Bonneville Power Administration

TRIBES

Muckleshoot Indian Tribe
Puyallup Tribe of Indians
Duwamish Tribe
Tulalip Tribe
Snoqualmie Tribe of Indians

LIBRARIES

King County Library System, Fairwood Branch
King County Library System, Maple Valley Branch
King County Library System, Covington Branch
King County Library System, Kent Regional Branch
King County Library System, Issaquah Branch
King County Library System, Newport Way Branch
King County Library System, Bellevue Regional Library
University of Washington Suzzallo Library
Renton Public Library

SPECIAL INTEREST GROUPS

Washington Environmental Council*
Seattle Audubon Society*
Trout Unlimited*
Washington Trout*
Sierra Club*
Issaquah Alps Trails Club

WHOLESALE WATER PURVEYORS

Seattle Public Utilities
Tacoma Water

WHOLESALE WATER PURVEYORS (continued)

Cedar River Water & Sewer District
Coal Creek Utility District*
Water District 111*
Soos Creek Water & Sewer District
Water District 90
Water District 125*
Lakehaven Utility District
East King County Regional Water Association
South King County Regional Water Association

NEWSPAPERS**

Daily Journal of Commerce
King County Journal
Seattle Times
Issaquah Press

EMERGENCY SERVICES

Covington Police Department*
King County Sheriff's Office*
Issaquah Police Department*
Newcastle Police Department*
Bellevue Police Department*
King County Fire District #37*
Maple Valley Fire and Life Safety*
Eastside Fire and Rescue*
Bellevue Fire Department*

SCHOOL DISTRICTS

Kent School District*
Issaquah School District*
Renton School District*
Bellevue School District*

OTHER

Puget Sound Energy
BNSF Railway
U.S. Postal Service Growth Management Coordinator*
Qwest Communications*
Comcast of Washington IV*
Williams Northwest Pipeline*

MEMBERS OF THE PUBLIC

Anne Acheson
Mark B. Bailey

MEMBERS OF THE PUBLIC (continued)

John Bratton
Michael Dinzelman
James Doman
R.J. Durdy
Ferrel Fop
Dick Gidner
Paul Giralmo
Arnie and Susan Graham
Leslie Groce
Curtis and Patricia Hulslander
David and Lorraine Latimer
Pastor Bob Lewis – Nativity Lutheran Church
Connie Marsh
Danny Rude
Val and Laurene Shrauner
Fred Whitney

*These entities on the distribution list have received only the Notice of Availability of the Final EIS. The Final EIS can be obtained by contacting the Cascade Water Alliance office at (425) 453-0930 or by visiting Cascade's Web site at www.cascadewater.org.

**A Notice of Availability of the Final EIS is being published in these newspapers.

Appendix B: Level of Service Standards for Transportation

Level of service (LOS) is one of the measurements used by regulatory jurisdictions to determine the traffic operating condition of a roadway segment or intersection. LOS is a rating that is assigned according to guidelines used by transportation professionals to indicate the overall degree of delay and congestion associated with specific roadways or intersections. LOS definitions as described in Table B-1 have been established by the National Academy of Sciences Transportation Research Board (*Highway Capacity Manual-Special Report 209*). The general public considers LOS A, LOS B, LOS C, and LOS D—which cover a range from free-flowing traffic to relatively long delays—as acceptable; most people will tolerate LOS E operations (which entail very long traffic delays) in urban conditions. LOS F, characterized by extreme traffic congestion, is undesirable and warrants consideration of improvements to increase roadway capacity.

Table B-1: Roadway Segment Level of Service Definitions

Level of Service	% of Free Flow Speed	Traffic Flow Characteristics
A	90%	The roadway operates under free-flow conditions. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Delay at signalized intersections is minimal.
B	70%	Roadway operation is reasonably unimpeded at average travel speeds. The ability to maneuver within the traffic stream is only slightly restricted, and delay at signalized intersections is not significant.
C	50%	The roadway operates at a stable level; however, the ability to maneuver and change lanes in mid-block locations may be more restricted than at LOS B, and longer queues, adverse signal coordination, or both may contribute to lower average travel speeds for the given street class.
D	40%	The roadway borders on a range in which small increases in flow may cause substantial increases in delay and decreases in travel speeds. LOS D may be due to adverse signal progression, inappropriate signal timing, high volumes, or a combination of these factors.
E	33%	The roadway is characterized by significant delays. Such operations are caused by a combination of adverse progression, high signal density, high volumes, extensive delays at critical intersections, and inappropriate signal timing.
F	<33%	The roadway is characterized by urban street flow at extremely low speeds for the given street class. Intersection congestion is likely at critical signalized locations, with high delays, high volumes, and extensive queuing.

Source: National Academy of Sciences Transportation Research Board

Note: Average delay, measured in seconds per vehicle, includes deceleration time, stopped time, and acceleration time resulting from the effects of intersection operations.

Under the Washington State Growth Management Act (GMA) of 1990, as amended, local governments are required to set acceptable levels of service limits for their transportation systems. Inside the urban growth area, each jurisdiction decides that it will accept a certain level of traffic congestion—as measured by LOS—and adopts this standard as part of the transportation element of its comprehensive plan. When a permit application for a project is submitted, the jurisdiction determines whether the effects of the project would cause the LOS in affected parts of the transportation system to fall below the acceptable standard. If the project would cause the LOS to fall below this standard, the local government has the authority to either prohibit the development's approval or require the developer to commit to, or pay for, transportation improvements or strategies to mitigate the effects. According to the GMA, such improvements must be completed "concurrent with the development," which in this case is defined to mean within 6 years.

Jurisdictions in the project area differ in how they designate an acceptable (LOS) rating. Most jurisdictions that would be affected by the project (WSDOT, and the cities of Kent, Covington, Renton, Newcastle, Bellevue, and Issaquah) have adopted LOS A through D as acceptable traffic operating conditions. King County has adopted a threshold of LOS A through LOS E to represent acceptable conditions.

In general, LOS standards are applied only to traffic generated by the operation of a proposed project. Construction traffic impacts, identified in Chapter 8, are regulated through the various permitting agencies.

Appendix C: List of Preparers

Name Affiliation	Contribution	Education Certifications/Licenses Professional Organizations	Years of Experience
Marc Auten HDR Engineering, Inc.	Water Environmental Health	BS, Environmental Science	4
Megan Bockenkamp HDR Engineering, Inc.	Animals	BS, Environmental Science	5
Denise DeJoseph Historical Research Associates, Inc.	Historic and Cultural Preservation	M.Sc., Archaeological Sciences BA, Anthropology	7
Gordon M. Denby, PE, PhD GeoEngineers, Inc.	Earth	PhD, Geotechnical Engineering MS, Geotechnical Engineering BS, Civil Engineering Registered Professional Engineer	30
Ron Grina, AICP HDR Engineering, Inc.	Air Public Services and Utilities	BS, Environmental Policy and Assessment NEPA/106 Certificate - U.S. Department of the Interior/National Park Service Member, American Institute of Certified Planners Member, American Planning Association	12
Karissa Kawamoto, AICP HDR Engineering, Inc.	Energy and Natural Resources	BA, Urban and Regional Planning Member, American Institute of Certified Planners	13
Jodie Lamb, LG, LEG GeoEngineers, Inc.	Earth	BS, Geology Licensed Geologist Licensed Engineering Geologist	9
Fusan Lin, PE, PTOE HDR Engineering, Inc.	Transportation	MS, Civil Engineering BS, Civil Engineering Registered Professional Engineer Registered Professional Traffic Operations Engineer	9
Bonnie Lindner HDR Engineering, Inc.	Scoping and Public Involvement Land and Shoreline Use Plans and Policies	BS, Business Administration IAP2 Certificate in Public Participation	18
Joshua Shippy, PE HDR Engineering, Inc.	Transportation	BS, Civil Engineering Registered Professional Engineer Associate Member, American Society of Civil Engineers	4.5
Mike Stimac, PE HDR Engineering, Inc.	EIS Manager	MS, Fisheries BS, Electrical Engineering Registered Professional Engineer	39
Pat Togher, PWS HDR Engineering, Inc.	Plants	MA, Environmental Studies BS, Information Science and Physical Geography Professional Wetland Scientist	10
Barb Whiton HDR Engineering, Inc.	Technical Editor	MA, Anthropology BA, Anthropology Member, Society for Technical Communication	21

Appendix D: Trenchless Construction Methods

Both the Preferred Alternative and the Green Route Alternative would use trenchless construction methods for some crossings of streams, roadways, and wetlands. *Trenchless construction* refers to a construction method that utilizes jack-and-bore techniques, microtunneling, and/or horizontal directional drilling (HDD). The goal of trenchless construction is to minimize direct impacts of construction on the built and natural environments. Some of key advantages of using trenchless construction include:

- The surface disturbance/restoration requirements are limited (due to minimized corridor width).
- These methods are especially useful in sensitive areas where surface disturbance would cause unacceptable effects or costly mitigation.
- Environmentally sensitive areas such as wetlands, streams, and shorelines can be bypassed underground with trenchless methods (HDR, 2006a).

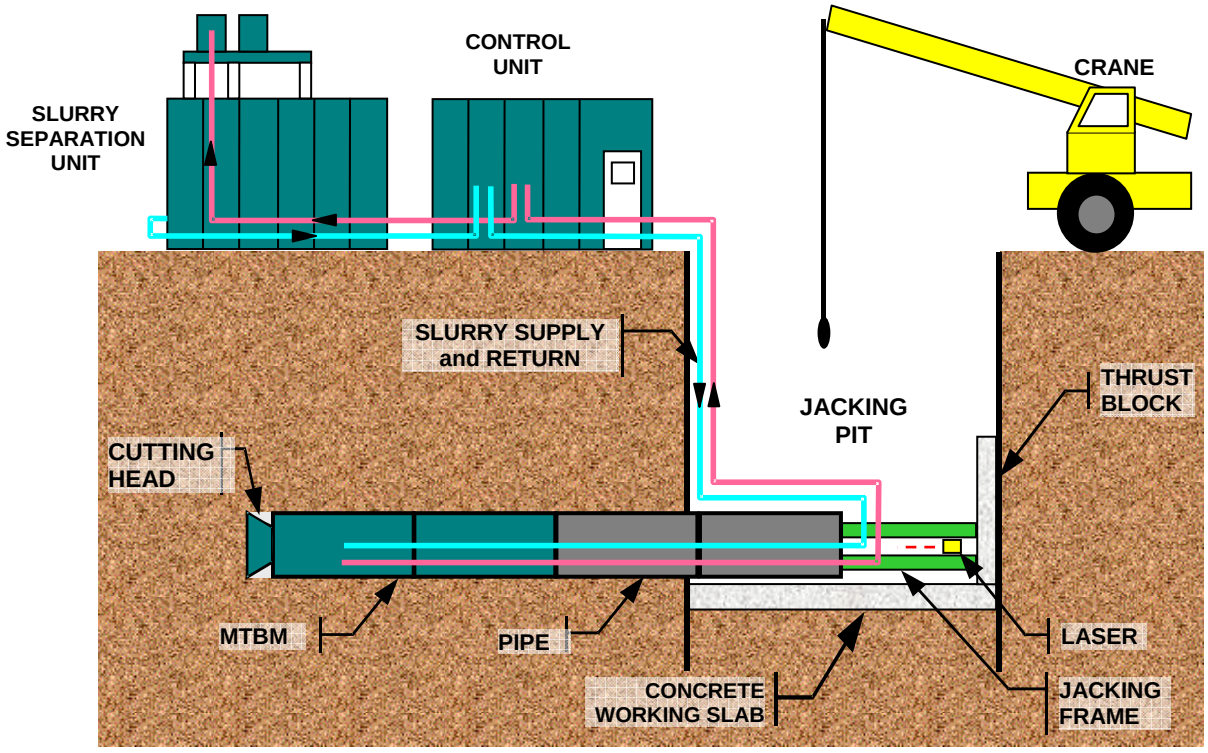
Trenchless construction methods are briefly summarized below:

Jack-and-Bore

The jack-and-bore method (auger boring) requires excavation of pits on both sides of the stream, wetland, or roadway so that steel casing can be jacked beneath the feature. During the boring process, a dry, rotating auger is driven through a jacked steel casing. The casing is jacked through the earth as the auger advances, while removing the spoil inside the casement by means of a rotary auger. The casing also serves to support the soil around it as the spoil is removed.

Microtunneling

The microtunneling process also requires excavation of pits on both sides of the stream, wetland, or roadway. The microtunnel method uses a boring machine to excavate the tunnel and the pipe casing is installed by jacking. As shown in the figure below, a microtunnel boring machine (MTBM) is remotely operated and guided. A cutting head is driven by hydraulic or electric motors, and a slurry is used to lubricate the pipe string during the jacking operation.



Source: Goodwin, 2000

Horizontal Directional Drilling (HDD)

HDD does not require deep shafts to launch or receive the HDD machine. Unlike the jack-and-bore and microtunnel alternatives, HDD can accommodate straight or gradually curved alignments because the direction of the drilling head can be adjusted at any stage during the boring to steer under highways, waterways, or wetlands. Installation of pipelines using HDD is typically a two-stage operation: (1) a pilot hole is drilled along the required path, and the bore is then back-reamed to a larger diameter to accommodate the pipe; (2) during this second pull-back stage, the pipe is attached to the reamer by means of a swivel connection, and is pulled into the enlarged bore as the drill string is withdrawn.

Appendix E: Existing Plans and Policies

This appendix describes the applicable land use plans, policies, environmental elements, and utility elements of the local jurisdictions that would be affected by construction and operation of the Tacoma–Cascade Pipeline (TCP). It explains how the project would be consistent with these plans, policies, and elements.

Preferred Alternative

The Preferred Alternative would pass through four local jurisdictions: the cities of Covington, Renton, and Issaquah, and unincorporated King County.

City of Covington

Table E-1 lists the City of Covington Comprehensive Plan goals and policies. A discussion of consistency follows the table.

Table E-1. City of Covington Goals and Policies

Description	Goal	Policy
Land Use Element	LNG 1.0. The City of Covington will encourage a future growth and development pattern that implements the Vision Statement and minimizes urban sprawl, protects critical areas, enhances the quality of life of all residents, and supports a healthy economy and employment growth.	LNP 1.7. Review all new development against the guidelines of the Vision Statement to preserve community character and neighborhood quality.
	LNG 6.0. The City of Covington shall preserve significant historic and archaeological properties and identify strategies and incentives for protection of these resources for the enrichment of future generations.	LNP 6.2 Consider the impacts of new development on historic resources as part of its environmental review process.
Environmental Element	EVG 1.0. Foster recognition of the significant role played by natural features and systems in determining the overall environmental quality and livability of the community.	EVP 1.10. To the extent possible or feasible, require that developers and property owners provide to the City accurate and valid environmental information.
		EVP 1.12. Use acquisition, enhancement, incentive programs, and appropriate regulations to preserve critical areas as permanent open space where development may pose hazards to health, property, important ecological functions, or environmental quality.
	EVG 2.0. Insure that land-use development policies protect the City's water quality.	EVP 2.7. Utilize erosion control measures and appropriate mitigation measures for grading and any work in or adjacent to wetlands, streams or lakes and their associated buffers.

Description	Goal	Policy
	EVG 4.0. Develop and implement a comprehensive water quality plan that will protect and restore stream habitats, and other surface and groundwater resources. The intent is to protect and enhance water quality resources for multiple benefits, including recreation, fish and wildlife resources and habitat, flood protection, water supply, and open space.	EVP 4.2. Evaluate the adequacy of the existing building setback and stream buffer requirements in relation to goals for water resource and fisheries and wildlife resource protection. When necessary, modify the requirements to achieve goals.
	EVG 6.0. Protect wetlands with a standard of no net loss of wetland functions or values within each drainage basin. Wetland functions are natural processes performed by wetlands. Wetlands promote food chain production, provide fish and wildlife habitat, maintain and improve water quality, retain water for recharge and discharge into groundwater aquifers, moderate surface water and stormwater flows. Other functions include, but are not limited to those discussed in U.S. Army Corps of Engineers regulations (33 CFR 320.4(b)(2), 1988). Wetland values are estimates, usually subjective, of the benefits of wetlands to society, and include aesthetics, education, scientific research, and recreation.	EVP 6.1. Maintain the quantity and quality of wetlands via current land-use regulation and review; increase the quality and quantity of the City's wetlands resource base via incentives and advance planning.
		EVP 6.7. Allow alterations to wetlands where necessary to: a. Accomplish a public agency or utility development, utilizing the necessary mitigation measures as detailed in the agency's or utility's Best Management Practices Plan; b. Provide necessary utility and road crossings, utilizing the necessary mitigation measures as detailed in the agency's or utility's Best Management Practices Plan.
	EVG 7.0. Preserve the existing hydraulic (flood storage and conveyance) and ecological functions of floodplains, associated with streams, lakes and wetlands to minimize future flood hazards. Where possible, these floodplain areas shall be enhanced or restored.	EVP 7.1. Any floodplain land use and floodplain management activities shall be carried out in accordance with the King County Flood Hazard Reduction Plan or its successor.
	EVG 9.0. Minimize the loss of vegetation as new development occurs. Continue to recognize the value of trees and other vegetation in increasing the livability of the City of Covington.	EVP 9.2. Require protection of valuable vegetation, when possible, during all phases of land-use development. In cases where development necessitates the removal of vegetation, require an appropriate amount of landscaping to replace trees, shrubs, and ground cover which were removed during development.
		EVP 9.7. Encourage the use of native plants in landscaping requirements and erosion control projects and in the restoration of stream banks, lakes, shorelines and wetlands.
	EVG 11.0. Regulate development in environmentally critical areas such as steep slopes and landslide-prone areas to prevent harm, to protect public health and safety, and to preserve the remaining sensitive areas in the City.	EVP 11.3. Incorporate erosion control BMPs and other development controls as necessary to reduce sediment discharge from grading and construction activities to minimal levels. Development controls shall include seasonal restrictions on clearing and grading.

Description	Goal	Policy
Utilities Element	UTG 1.0. To enhance the efficiency and quality of service from public and private utility providers through the coordination of fire/emergency, utility, land use, and transportation planning so that utilities and facilities, including water, sewer, surface water, solid waste, electricity, natural gas, telecommunications, cable television, and satellite transmission are available or can be provided to serve in a manner which is fiscally and environmentally responsible, aesthetically acceptable to the community, and safe for nearby residents.	UTP 1.8. Coordinate and seek to cooperate with other jurisdictions when transmission facility additions or improvements cross jurisdictional boundaries.
		UTP 1.9. Regulate construction of utilities within sensitive areas in accordance with the Sensitive Areas Regulations.
		UTP 1.11. Coordinate public road design, construction and maintenance projects with utility design, construction and maintenance.
		UTP 1.12. Require utility providers to design, locate, and construct facilities within publicly owned properties and rights-of-way when possible to reasonably minimize significant, individual, and cumulative adverse impacts to the environment and protect environmentally sensitive areas. Requirements should include the following: b. Locate utility corridors in existing cleared areas, when possible. c. Locate utility facilities and corridors outside of wetlands, when possible. d. Minimize water and sewer line crossings of fish-bearing watercourses, when possible. f. Minimize corridor width.
		UTP 1.15. Coordinate street paving efforts with utility providers to prevent excavation of newly paved street and trail surfaces by prohibition of excavation of new pavement for utility projects for a period of the first 5 years after new paving.
	UTG 7.0. Telecommunication technologies are converging so rapidly that the policy on widespread availability of cable should extend to other formats and systems to the extent other formats are consistent with state and federal regulations.	UTP 7.11. For infrastructure projects within City right-of-way, the City should assist in coordination between telecommunication providers to ensure that all interested parties are given the opportunity to install facilities in common trenches.

Source: City of Covington, 2003b

The Preferred Alternative would be consistent with the Land Use Element based on the following factors:

- The project would be developed to comply with current development regulations and standards. Review of the Preferred Alternative as part of permitting would help ensure that the guidelines of the Vision Statement to preserve community character and neighborhood quality would be achieved.

- The project would not impact any historic structures. There is the potential to encounter archaeological resources during construction, especially when crossing floodplain and waterways. Appropriate measures would be implemented if anything of archaeological importance was encountered.

The Preferred Alternative would be consistent with the Environmental Element based on the following:

- The project would be designed to comply with the applicable federal, state, and local sensitive area regulations.

- The project would be located within public road rights-of-way for most of its length, thus minimizing the impact on sensitive/critical areas.

- Additionally, the Preferred Alternative would utilize trenchless technologies for crossing most critical/sensitive areas (streams, wetlands, floodplains). Strict adherence to these principles as part of the design and construction would help preserve the environment to the greatest extent possible.

- Any roadside vegetated areas impacted during construction would be restored with new plantings or hydroseeding.

- An Erosion and Sedimentation Control Plan (ESC) utilizing Best Management Practices (BMPs) would be implemented throughout project construction.

The Preferred Alternative would be consistent with the Utilities Element based on the following:

- The project would be designed in a manner which was fiscally and environmentally responsible, aesthetically acceptable to the community, and safe for nearby residents. The Cascade Regional Water Supply System (CRWSS) is being developed by Cascade and its members and the fiscal responsibilities are outlined in the Interlocal Agreement. The TCP would be installed underground and its design would be safe to the community.

- The pipeline would be designed and constructed to comply with the applicable local sensitive areas regulations, and the majority of the Preferred Alternative would be constructed in publicly owned rights-of-way.

- Because most of the project would be constructed within public roadways, extensive coordination would occur with local jurisdictions to determine their plans for Capital Improvement Projects (CIPs) on the impacted roadways, and to coordinate construction activities with their CIPs.

- In certain areas, the Preferred Alternative would utilize trenchless construction methods for crossing streams and wetlands and would minimize construction corridor widths, wherever practical. Strict adherence to these principles as part of design and construction would help preserve the environment to the greatest extent possible.

King County

Table E-2 lists the King County Comprehensive Plan goals and policies. A discussion of consistency follows the table.

Table E-2. King County Goals and Policies

Description	Goals and Policies
Chapter 3 Rural Legacy and Natural Resource Lands III. Rural Public Facilities and Service Policies	R-301. King County shall work with cities and other agencies providing services to the Rural Area to adopt standards for facilities and services in the Rural Area that protect basic public health and safety and the environment, but are financially supportive at rural densities and do not encourage development.
	R-302. Public spending priorities for facilities and services within the Rural Area should be as follows: a. First, to maintain existing facilities and services that protect public health and safety; and b. Second, to upgrade facilities and services when needed to correct levels of service deficiencies without unnecessarily creating additional capacity for new growth.
	R-303. In the Rural Area, standards and plans for utility service should be consistent with long-term, low-density development and resource industries. Utility facilities that serve the Urban Growth Area but must be located in the Rural Area (for example, a pipeline from a municipal watershed) should be designed, and scaled to serve primarily the Urban Growth Area…".
	R-231. Rural development standards shall be established to protect the natural environment by addressing seasonal and maximum clearing limits, impervious surface limits, surface water management standards that emphasize preservation of natural drainage systems and water quality, groundwater protection, and resource-based practices.
	D. Erosion and Landslide Hazards 1. Erosion Hazard Areas. E-158. Grading and construction activities shall implement erosion control Best Management Practices and other development controls as necessary to reduce sediment and pollution discharge from construction sites to minimal levels.
	E. Fish and Wildlife E-178. King County should protect salmonid habitats by ensuring that land use and facility plans (transportation, water, sewer, electricity, gas) include riparian and stream habitat conservation measures developed by the county, cities, federally recognized tribes, service providers, and state and federal agencies. E-181. New development should, where possible, incorporate native plant communities, both through preservation of existing native plants into the site plan, and addition of new native plants. E-184. Conservation of native soils should be accomplished through various mechanisms to ensure soils remain healthy and continue to function as a natural sponge and filter, minimizing erosion and surface water runoff. Native soils should be retained on site and reused on site to the maximum extent possible.
Chapter 4 Environment	C. Water Resources E-120. Development shall support continued ecological and hydrologic functioning of water resources and should not have a significant adverse impact on water quality or water quantity, or sediment transport and should maintain base flows, natural water level fluctuations, groundwater recharge in Critical Aquifer Recharge Areas and fish and wildlife habitat. E-128. Development within designated shoreline environments shall preserve the resources and ecology of the water and shorelines, avoid natural hazards, promote visual and physical access to the water, protect ESA listed species and their critical habitat, and preserve archaeological, traditional cultural resources, shellfish resources, and navigation rights. Protection of critical areas shall take priority over visual values and physical access.

Description	Goals and Policies
Chapter 4 Environment (continued)	E-130. Stormwater runoff shall be managed through a variety of methods, with the goal of limiting impacts to aquatic resources, reducing the risk of flooding, protecting and enhancing the viability of agricultural lands and promoting groundwater recharge. Methods of stormwater management shall include temporary erosion and sediment control, flow control facilities, water quality facilities as required by the Surface Water Design Manual, and best management practices as described in the Stormwater Pollution Control Manual. E-132. River and Stream channels, stream outlets, headwater areas, and riparian corridors should be preserved, protected and enhanced for their hydraulic, hydrologic, ecological and aesthetic functions, including their functions in providing woody debris sources to salmonid-bearing streams. E-136. King County's overall goal for the protection of wetlands is no net loss of wetland functions and values within each drainage basin. E-137. Development adjacent to wetlands shall be sited such that wetland functions and values are protected, an adequate buffer around the wetlands is provided, and significant adverse impacts to wetlands are prevented. E-143. Alterations to wetlands may be allowed to: A. Accomplish a public agency or utility development. E-150. The existing flood storage and conveyance functions and ecological values of floodplains, wetlands, and riparian corridors shall be protected, and should, where possible be enhanced or restored. E-151. King County's floodplain land use and floodplain management activities shall be carried out in accordance with the King County Flood Hazard Reduction Plan.
	D. Erosion and Landslide Hazards 1. Erosion Hazard Areas. E-158. Grading and construction activities shall implement erosion control Best Management Practices and other development controls as necessary to reduce sediment and pollution discharge from construction sites to minimal levels.
	E. Fish and Wildlife E-178. King County should protect salmonid habitats by ensuring that land use and facility plans (transportation, water, sewer, electricity, gas) include riparian and stream habitat conservation measures developed by the county, cities, federally recognized tribes, service providers, and state and federal agencies. E-181. New development should, where possible, incorporate native plant communities, both through preservation of existing native plants into the site plan, and addition of new native plants. E-184. Conservation of native soils should be accomplished through various mechanisms to ensure soils remain healthy and continue to function as a natural sponge and filter, minimizing erosion and surface water runoff. Native soils should be retained on site and reused on site to the maximum extent possible.
Chapter 7 Services, Facilities and Utilities II. Facilities and Services	B. Urban and Rural Services F-207. In the Rural Area, services provided by agencies should support a rural level of development and not facilitate urbanization.
	H. Water Supply / 2. Regional Water Supply Planning F-234. King County should assure that a regional water supply plan for all of King County is prepared in conjunction with water utilities and in coordination with affected federally recognized tribal, local and state governments. A continuous and meaningful public process should be used to develop the regional water supply plan, resulting in a plan that is adopted by elected public officials in the region and used by the state in making water resource decisions. The regional water supply plan should implement and be consistent with growth management decisions made by local and regional jurisdictions under the GMA and the approved water quality and quantity strategies adopted by the region in compliance with federal requirements under the Endangered Species Act, Clean Water Act, and other authorities relevant to water quantity and quality.

Description	Goals and Policies
	3. Utility System Interties F-236. King County supports interties that allow the transfer of water resources among water utilities in urban area to meet the projected demands for growth. The transfer of water must be consistent with locally adopted growth management plans, regional water supply plans, groundwater plans, watershed plans, and approved Coordinated Water System Plans, and implement approved Endangered Species Act response requirements and Clean Water Act requirements. F-237. King County supports the development of appropriate regional water intertie capital projects, subject to approval from local, state, and federal agencies and consistent with Policy F-236.
King County Growth Management Planning Council's Countywide Planning Policies	Contiguous and Orderly Development of Urban Services to Such Development This provision provides guidelines which require that the planning and financing services are coordinated and phased among jurisdictions to (1) ensure that development within urban areas is provided with a full range of urban services, (2) ensure that infrastructure improvements are not provided in such a way as to undermine the countywide development process, and (3) protect natural resources. In addition, the Countywide policies call for (1) regional coordination of the water supply, (2) the provision of urban water and sewer systems, as opposed to wells and septic tanks in the urban areas identified for growth in the next ten years, and (3) consideration of decentralized and other treatment technologies.

Source: King County, 2004b

Rural Land Use Policies would not directly apply to the Preferred Alternative because Cascade was formed to jointly plan, develop, and operate a regional water supply system for its members, not for rural areas. Although the Preferred Alternative would cross rural areas, Cascade would not serve water directly to the public and Cascade does not plan to own or operate distribution facilities (HDR, 2005a).

Issues related to land use development, rural densities, and the adoption of standards for facilities in these rural areas would be subject to the local jurisdiction's regulations, plans, and policies. In addition, maintenance and/or upgrade of facilities and services would be conducted by Cascade's members in accordance with the local jurisdiction regulations, plans, and policies.

The Preferred Alternative would meet regional water supply planning needs, utility system interties for transfer of water resources, and contiguous and orderly development of utilities (Countywide Planning Policy). The basis for these determinations is as follows:

- The CRWSS is a regional water supply system that is being developed by Cascade and its members and the fiscal responsibilities are outlined in the Interlocal Agreement.
- Establishing the CRWSS would enhance the capacity and reliability of regional water supply resources.
- The Preferred Alternative would be installed underground and its design would be safe to the community. The required permits would be obtained to comply with applicable federal, state, and local regulations.
- The pipeline would be designed and constructed to comply with the applicable local sensitive areas regulations. The majority of the Preferred Alternative would be constructed in publicly owned rights-of-way. Additionally, in certain areas, the Preferred Alternative would utilize trenchless construction methods for crossing most streams and some wetlands. Strict

adherence to these principles as part of design and construction would help preserve the environment to the greatest extent practicable.

Constructing the Preferred Alternative would not change the rural character of development or facilitate urbanization. Land use development would be subject to the local government development regulations and comprehensive planning policies (Policy II Facilities and Services, B).

City of Renton

Table E-3 lists the City of Renton Comprehensive Plan goals, objectives, and policies. A discussion of consistency follows the table.

Table E-3. City of Renton Goals, Objectives, and Policies

Description	Goal/Objective	Policy
Land Use Element	Plan for future growth of the Urban Area based on regionally developed growth forecasts, adopted growth targets, and land capacity as determined through implementation of the Growth Management Act.	
Utilities Element	Objective U-A: Provide an adequate level of public utilities in response to and consistent with land use, protection of the environment, and annexation goals and policies.	Policy U-1. Utility facilities and services should be consistent with the growth and development concepts directed by the Comprehensive Plan.
		Policy U-5. Encourage the appropriate siting, construction, operation, and decommissioning of all utility systems in a manner that reasonably minimizes impacts on adjacent land uses.
		Policy U-9. Where appropriate, work cooperatively with other jurisdictions to ensure that reliable and cost-effective utilities are available to meet increasing demands resulting from local and regional growth.
	Objective U-D: Provide, protect, and maintain a consistent, ample, and safe water supply for the City and future service areas.	Policy U-35. Protect water resources to assure continued long-term, high quality groundwater and artesian spring water supplies.
		Policy U-37. The intensity and type of development should be limited in the Aquifer Protection Area to those types of development that do not create adverse impacts on the aquifer.
		Policy U-75. Encourage the retention of natural vegetation along lakes, ponds, rivers, and streams, where appropriate, in order to help preserve water quality, protect fishery resources, and control erosion and runoff.

Description	Goal/Objective	Policy
	Objective U-F: Provide and maintain surface water management systems to minimize impacts on natural systems and to protect the public, property, surface water bodies, fish habitat, and groundwater from changes in the quantity and quality of storm water runoff due to land use changes.	Policy U-80. Implement stormwater standards that adequately control flow (quantity) and quality of stormwater runoff from new and redevelopment projects to protect public health and safety, to prevent property damage, prevent erosion, and protect surface water quality, groundwater quality, and fish habitat.
Environmental Element	Objective EN-A: Protect, restore and enhance environmental quality through land use plans and patterns, surface water management programs, park master programs, development reviews, incentive programs and work with citizens, land owners, and public and private agencies.	Policy EN-1. Prevent development on lands where development would create hazards to life, property, or environmental quality.
	Objective EN-C: Protect and enhance the City's rivers, major and minor creeks and intermittent stream courses.	Policy EN-6. Develop land use regulations which establish and enhance setbacks along all waterways and intermittent stream courses. The purpose of the setbacks would be to retain an enhancement of the natural vegetation for infiltration, maintenance of wildlife habitat and normal water temperatures, filtration, and the retardation of run-off and erosion.
	Objective EN-D: Preserve and protect wetlands for overall system functioning.	Policy EN-13. When development may impact wetlands, the following hierarchy should be followed in deciding the appropriate course of action: a. avoid impacts to the wetland, b. minimize impacts to the wetland, c. restore the wetland when impacted, d. recreate the wetland at a ratio which will provide for its assured viability and success, e. enhance the functional values of an existing degraded wetland.
	Objective EN-E: Protect the natural functions of 100 year floodplains and floodways.	Policy EN-18. Prohibit permanent structures from developing in floodways due to risks associated with deep and fast flowing water.
		Policy EN-19. Limit development within the 100 year floodplain to that which is not harmed by flooding. Roads and finished floors of structures should be located above the 100 year flood level and new development should provide compensation for existing flood storage capacity due to filling.
	Objective EN-K: Protect and enhance wildlife habitat throughout the City.	Policy EN-54. Retain and enhance aquatic and riparian habitats by requiring vegetated buffers for all new development along waterway corridors.
	Objective EN-L: Environmentally sensitive areas should be identified and regulated to protect life and property according to the severity of the natural hazards.	Policy EN-57. Regulate identified sensitive areas through the implementation of regulations addressing uses, densities, clearing, grading, and/or vegetation removal.

Description	Goal/Objective	Policy
		Policy EN-58. Designate setbacks around environmentally sensitive areas to protect the areas and the users.
		Policy EN-62. The final identification of environmentally sensitive or critical areas, hazardous sites or portions of sites should be established during the review of project proposals.
	Objective EN-M: Protect and promote clean air and minimize individual and cumulative noise impacts to ensure a healthful environment.	Policy EN-67. Limit noise from construction activities to reasonable hours of the day and days of the week.
	Steep Slopes, Landslide, and Erosion Hazards	Policy EN-70. Land uses on steep slopes should be designed to prevent property damage and environmental degradation, and to enhance greenbelt and wildlife habitat values by preserving and enhancing existing vegetation to the maximum extent possible.
		Policy EN-73. Protect high landslide areas from land use development and roads.
		Policy EN-74. Retain or replace native ground cover after construction in areas subject to erosion hazards. Special construction practices should be used, and allowable site coverage may need to be reduced to prevent erosion and sedimentation. Limitations on the time when the site work can be done may also be appropriate.
		Policy EN-76. Design, locate, and construct utility systems in a manner which will preserve the integrity of the existing land forms, drainage ways, and natural systems.

Source: City of Renton, 2004; City of Renton, 2005b.

The Land Use Element would not directly apply to the Preferred Alternative because Cascade was formed to jointly plan, develop, and operate a regional water supply system for its members. The TCP is not intended to be an independent utility service to urban areas. Although the Preferred Alternative would cross urban areas, Cascade would not serve water directly to the public and does not plan to own or operate distribution facilities (HDR, 2005a).

The Preferred Alternative would be consistent with the Utilities Element based on the following:

- Impact on adjacent land uses would be minimized by constructing most of the alignment within road rights-of-way.
- Although the Preferred Alternative would be a buried transmission pipeline, it would be constructed to avoid artesian spring water supplies and aquifers.
- Any vegetation temporarily impacted along ponds, rivers, and streams would be restored with plantings and hydroseeding.
- An ESC Plan utilizing BMPs would be implemented throughout project construction.

The Preferred Alternative would be consistent with the Environmental Element based on the following:

- The project would be developed to comply with current development regulations and standards. Review of the Preferred Alternative as part of permitting would help ensure that environmental quality would be protected.
- Trenchless crossings of critical/sensitive areas (streams, wetlands, floodplains) would be utilized, where possible.
- The project would be a buried water transmission pipeline with no impact to the storage capacity of the Cedar River floodplain.
- Noise from construction activities would occur only during hours approved by the City of Renton.

City of Issaquah

Table E-4 lists the City of Issaquah Comprehensive Plan objectives and policies. A discussion of consistency follows the table.

Table E-4. City of Issaquah Objectives and Policies

Description	Objective	Policy
Land Use Element	Objective L-1: Natural Environment and Amenities: Land uses within the City shall maintain and enhance the natural environment and amenities of the City and surrounding area.	Policy L-1.1 Maintain and enhance the natural environment: The Land Use Code shall maintain and enhance the natural environment and amenities. 1.1.3 Preserve the natural forest character of Issaquah by: 1.1.3.8 Require protection of critical areas.
		Policy L-1.2 Balance: Balance urban development and the health and safety of citizens against the value associated with the protection of the natural environment, significant trees and environmental critical areas; 1.2.3 Ensure that all development is consistent with the City's vision through the implementation of the Land Use Code, critical areas regulations and other development regulations.

Description	Objective	Policy
Utilities and Public Service	Objective U1: Service Provision. Ensure that utility services are available to support development that is consistent with the Land Use Plan.	Policy U1.2 Land Use Code. Amend the Land Use Code and related regulations to: 1.2.2 Permit Applications: Process permit applications for utility facilities in a timely and consistent manner, in accordance with development regulations that ensure predictability, provide adequate capacity for future planned growth consistent with the Comprehensive Plan, and through the development review process which defines proportionate fair share mitigation for any related increase in service needs. 1.2.8 Joint Use of Public Facilities and Utility Corridors: Encourage the joint use of public facilities and joint use of utility corridors, provided that such use is consistent with limitations as may be prescribed by applicable law and prudent utility practice.
	Objective U2: Water. Provide for the City's long term water needs by: protecting the aquifer and recharge areas, providing reliable levels of service, including water for domestic use and fire protection, and ensuring future water supplies by pursuing additional sources, as well as conservation and reuse measures.	Policy U2.6 Water Supply. Pursue a combination of strategies to extend existing water supplies and obtain additional new sources of water supply, which balances the environmental and economic cost, including but not limited to: 2.6.2 Where feasible and prudent, pursue agreements with adjacent or regional purveyors for additional water supplies, including the acquisition of small water systems or individual wells.
		Policy U2.16 Coordination. Coordinate and cooperate with other adjacent and regional water purveyors and state regulators to identify, protect and maintain a reliable and sustainable water supply.
	Objective U4: Storm Water. Manage the quantity and quality of stormwater runoff to protect public health and safety, surface and groundwater quality, and natural drainage systems through implementation of the Issaquah Creek Basin and Non-Point Action Plan (1966)(and the Stormwater Management Plan policies (2003 and subsequent updates).	Policy U.4.2 Flood Protection. Coordinate with property owners adjacent to the Issaquah and Tibbetts Creeks to increase flood protection, to the greatest extent feasible through both public and private projects, at the following levels of protection. 4.2.2 Tibbetts Creek. The level of protection, as provided by the Tibbetts Creek Greenway Project, is the 100-year event.

Description	Objective	Policy
		Policy U4.4 Stormwater Management and Water Quality Protection. 4.4.1 Implement and ensure the compliance of stormwater programs with National Pollution Discharge Elimination System Phase II stormwater permitting by incorporating the following elements: 4.4.1.4 Construction site stormwater runoff control.
	Objective U6. Private Utilities. Coordinate City land use and utility facility planning to ensure consistency, as well as enable utility service providers to meet public service obligations.	Policy U6.2 Utility Facility Decisions. Decisions regarding utility facilities shall be made consistent with the City's land use goals, regional demand and resources, and shall reinforce an interconnecting regional distribution net work by: 6.2.1 Encouraging cooperation with other jurisdictions in the planning and implementation of multi-jurisdictional utility facility additions and improvements.
		Policy U6.7 Major Utility Installations. Review proposals for major utility installations such as transmission lines and substations to assure that aesthetic values and land use conflicts are minimized and mitigated.

Source: City of Issaquah, 2005.

The Preferred Alternative would be consistent with the Land Use Element based on the following:

- The entire alignment within the City of Issaquah would be located within SR 900, thus minimizing impacts to critical/sensitive areas.
- The project would utilize trenchless technologies and/or reduced construction corridors for certain crossings of critical/sensitive areas, minimizing the impact to these important features.
- The project would be developed to comply with current Land Use Code, critical areas regulations, and other development regulations. Review of the Preferred Alternative as part of permitting would ensure that the project was consistent with the City's vision of protecting the natural environment.

The Preferred Alternative would be consistent with the Utilities and Public Services Element based on the following:

- The project alignment for the Preferred Alternative would be constructed within the SR 900 corridor in the City of Issaquah concurrently with the SR 900 road widening project.
- The City of Issaquah is a member of the Cascade Water Alliance. Cascade was formed to jointly plan, develop, and operate a regional water supply for its members.
- The Preferred Alternative would cross Tibbetts Creek within the SR 900 alignment, thus there would be no impact to the Tibbetts Creek floodplain.

- The Preferred Alternative would be designed and constructed in compliance with federal, state, and local regulations. A National Pollutant Discharge Elimination System (NPDES) Stormwater Construction Permit would be obtained from the Washington State Department of Ecology.
- Aesthetic values and land use conflicts would be mitigated because the Preferred Alternative would be a buried pipeline located within public rights-of-way for most of its alignment.

Green Route Alternative

The Green Route Alternative would pass through four local jurisdictions: the cities of Kent, Renton, and Newcastle, and unincorporated King County.

City of Kent

Table E-5 lists the City of Kent Comprehensive Plan goals and policies. A discussion of consistency follows the table.

Table E-5. City of Kent Goals and Policies

Description	Goal	Policy
Land Use Element	Encourage a future growth and development pattern which implements the community's vision, protects environmentally sensitive areas, and enhances the quality of life for all Kent residents.	
Utilities Goals and Policies	Goal UT-1. Designate the general location and capacity of existing and proposed utility facilities.	Policy UT-1.2. Coordinate with utility providers to ensure that the general location of existing and proposed utility facilities is consistent with other elements of the comprehensive plan.
	Goal UT-2. Make decisions regarding utility facilities within Kent's planning area in a manner consistent with and complimentary to, regional demand, resources, and systems.	Policy UT-2.1. Accommodate those additions and improvements to utility facilities that enhance the capacity and reliability of regional resources, particularly when multi-jurisdictional benefits within the region can be achieved.
		Policy UT-2.3. Encourage the designation and development of utility corridors and facilities, consistent with local and regional needs and resources. The City shall encourage the joint use of utility corridors, including with transportation rights-of-way, where applicable. The City understands that some utilities may have unique safety and maintenance requirements which limit their inclusion in joint use corridors.
Environment and Conservation Goals and Policies	Goal UT-4. Facilitate and encourage conservation of natural resources to prevent the unnecessary consumption of land and to improve regional air quality.	

Source: City of Kent, 2004a.

Construction of the Green Route Alternative would be consistent with the City of Kent Land Use Element Goal based on the following factors:

- The Green Route Alternative would be designed, constructed, and operated to comply with current development regulations and standards.
- The design and construction methods would incorporate avoidance and minimization techniques to reduce impacts to environmentally sensitive areas.

The Green Route Alternative would be consistent with the Utilities Goals and Policies based on the following factors:

- The project would enhance the capacity and reliability of regional water supply infrastructure. Regional demand and coordination with local utility providers would also be considered in the design and development of the pipeline. Incorporating these features into the design of the Green Route Alternative would achieve consistency.

The project would be consistent with the Environmental Goals and Policies based on the following factors:

- The design of the Green Route Alternative would avoid and/or minimize impacts to the natural environment. For example, trenchless construction methods would be used in selected areas to reduce the potential disturbance to sensitive areas, including wetlands, streams, and riparian vegetation.
- The construction corridor width would be minimized.

Strict adherence to the above principles as part of design and construction would help preserve the environment to the greatest extent practicable.

King County

Consistency of the Green Route Alternative with applicable elements of the King County Comprehensive Plan would be similar to those for the Preferred Alternative.

City of Renton

Consistency of the Green Route Alternative with applicable elements of the City of Renton Comprehensive Plan would be similar to those for the Preferred Alternative.

City of Newcastle

Table E-6 lists the City of Newcastle Comprehensive Plan goals and policies. A discussion of consistency follows the table.

Table E-6. City of Newcastle Goals and Policies

Description	Goal	Policy
Land Use Element	LU-G1. The City of Newcastle should plan current and future land uses in accordance with the values and vision of Newcastle residents and business people and consistent with the Growth Management Act.	LU-P1. New development within the City of Newcastle shall comply with adopted zoning and subdivision regulations.
	LU-G8. The City of Newcastle should strive to preserve and enhance the natural environment, including air quality, water resources, natural features that contribute to the City's scenic beauty, and critical areas as defined by the Growth Management Act.	LU-P42. It shall be the developer's responsibility to demonstrate that any impacts on critical areas will not result in significant risk to public health or safety, public or private property, or the environment.
		LU-P49. Development in the City of Newcastle shall occur in a manner that supports the continued ecological and hydrologic functioning of water resources and avoids significant adverse impacts on water quality and quantity.
		LU-P58. Stream crossings for streets, utilities, and other development shall be avoided where reasonable alternatives have lesser impacts on habitats. Where no reasonable alternatives are possible, impacts on habitats shall be minimized with compensatory mitigation provided as appropriate.
		LU-P62. The City of Newcastle shall strive for no net loss of wetland functions or values within each drainage basin.
		LU-P65. Wetland alterations shall be allowed when all wetland functions are evaluated, the least harmful reasonable alternatives are pursued, and affected significant functions are appropriately mitigated. Alterations to wetlands may be allowed to: a. Accomplish a public agency or utility development; b. Provide necessary utility and road crossings; c. Avoid denial of reasonable use of the property.
Utilities Element	UT-G1. To ensure that utilities including electricity, natural gas, and telecommunications transmission are available or can be provided to serve the projected population growth within the planning area in a manner which is fiscally and environmentally responsible, aesthetically acceptable to the community and safe for nearby inhabitants.	UT-P3. The City of Newcastle shall promote collocation of major utility transmission facilities such as high voltage electrical transmission lines and water and natural gas trunk pipe lines within shared utility corridors, to minimize the amount of land allocated for this purpose and the tendency of such corridors to divide neighborhoods.

Source: City of Newcastle, 2003b.

The Green Route Alternative would be consistent with the Land Use Element based on the following factors:

- The project would be designed, constructed, and operated to comply with current development regulations and standards.
- The design and construction methods would incorporate avoidance and minimization techniques to reduce impacts to environmentally sensitive areas.

The Green Route Alternative would be consistent with the Utilities Element based on the following factors:

- The pipeline would be located totally within public road rights-of-way within the City of Newcastle, thus minimizing impacts to the environment.
- The project would be a buried pipeline with only minimal aesthetic impacts due to above-grade appurtenances (e.g., air relief vents, cathodic test stations).

City of Bellevue

Table E-7 lists the City of Bellevue Comprehensive Plan goals and policies. A discussion of consistency follows the table.

Table E-7. City of Bellevue Goals and Policies

Description	Goal	Policy
Land Use Element	To develop and maintain a land use pattern that: • Protects natural systems and helps realize the vision of a "City in a Park"	Policy LU-2. Support the Growth Management Act by developing and implementing a land use vision that is consistent with the GMA goals, the regional Vision 2020, and the King County Countywide Planning Policies.
Utilities Element	To process permits and approvals for utility facilities in a fair and timely manner and in accordance with development regulations which encourage predictability.	Policy UT-1. Utilize design and construction standards which are environmentally sensitive, safe, cost-effective, and appropriate.
		Policy UT-3. Ensure that the location, type, and size of all public facilities is determined and/or approved by the City.
		Policy UT-9. Coordinate with other jurisdictions and governmental entities in the planning and implementation of multi-jurisdictional utility facility additions and improvements.
		Policy UT-48. Encourage cooperation with other jurisdictions in the planning and implementation of multi-jurisdictional utility facility additions and improvements. Decisions made regarding utility facilities shall be in a manner consistent with, and complementary to, regional demand and resources, and shall reinforce an interconnected regional distribution network.

Description	Goal	Policy
Environmental Element	To integrate the natural and developed environments to create a sustainable urban habitat with clean air and water, habitat for fish and wildlife, and comfortable and secure places for people to live and work.	
	Environmental Stewardship: To promote a sustainable urban environment by weighing environmental concerns in all decision-making processes.	Policy EN-3. Minimize, and where practicable, eliminate the release of substances into the air, water, and soil that may degrade the quality of these resources or contribute to global atmospheric changes.
		Policy EN-10. Utilize the best scientific information available in an adaptive management approach to preserve or enhance the functions and values of critical areas through regulations, programs, and incentives.
		Policy EN-17. Establish land use regulations that limit the amount of impervious surface area in new development and redevelopment city-wide.
	Water Resources: To preserve and enhance water resources.	Policy EN-35. Employ the Best Management Practices and technology, education, and enforcement strategies to minimize non-point source pollution.
		Policy EN-39. Restrict the runoff rate, volume, and quality to predevelopment levels for all new development and redevelopment.
		PolicyEN-41. Preserve and maintain fish and wildlife habitat conservation areas and wetlands in a natural state and restore similar areas that have become degraded.
	Earth Resources and Geologic Hazards: To preserve and enhance vegetation and earth resources.	Policy EN-44. Regulate land use and development to protect natural topographic, geologic, vegetational, and hydrological features.
		Policy EN-49. Preserve existing vegetation or provide or enhance vegetation that is compatible with the natural character of Bellevue.
	Fish and Wildlife Habitat Conservation Areas: To provide fish and wildlife habitat of sufficient diversity and abundance to sustain existing indigenous wildlife populations.	Policy En-59. Manage Aquatic habitats, including shoreline and riparian (streamside) habitats to preserve and enhance their natural functions of providing fish and wildlife habitat and protecting water quality.
		Policy EN-62. Prohibit creating new fish passage barriers and removing existing artificial fish passage barriers in accordance with applicable state law regarding water crossing structures.

Description	Goal	Policy
		Policy EN-64. Preserve and enhance native vegetation in the Protection Zone and integrate suitable native plants in urban landscape development.
	Air Quality: To meet federal, state, regional, and local air quality standards through coordinated, long-term strategies that address the many contributors to air pollution.	Policy EN-87. Reduce the amount of air-borne particulates through a street sweeping program, dust abatement on construction sites, and other methods to reduce the sources of dust.
	Noise: To control the level of noise pollution in a timely manner which promotes the use, value, and enjoyment of property; sleep and repose; and a quality urban environment.	Policy EN-88. Ensure that excessive noise does not impair the permitted land use activities in residential, commercial, and industrial land use districts.

Source: City of Bellevue, 2006.

The Green Route Alternative would be consistent with the Land Use Element based on the following factors:

- The project would be developed to comply with current development regulations and standards which would help ensure that the City's land use vision would be achieved.

The project would be consistent with the Utilities Element based on the following factors:

- The project would be designed to comply with federal, state, and local regulations.
- The City of Bellevue is a member of Cascade Water Alliance. Cascade was formed to jointly plan, develop, and operate a regional water supply for its members.

The project would be consistent with the Environmental Element based on the following factors:

- The project would be located entirely within public road rights-of-way in the City of Bellevue, thus minimizing the impact on sensitive/critical areas.
- The project would protect critical/sensitive areas (e.g., Coal Creek) by using either trenchless technologies or crossing above/below existing culverts.
- Any roadside vegetated areas impacted during construction would be restored with new plantings or hydroseeding.
- An ESC Plan utilizing BMPs would be implemented throughout project construction.
- The project would be constructed within existing roadways and not create any new impervious surfaces.
- Construction contractors would be required to comply with regulatory requirements pertaining to air quality and implement appropriate dust control measures as necessary.
- Noise from construction activities would occur only during hours approved by the City of Bellevue.

Appendix F: Comments and Responses

This appendix includes the comments received on the Draft EIS and Cascade's responses to those comments. The comment letters are reproduced in the following pages, annotated by assigned comment numbers. Cascade's responses follow each comment letter.

The Draft EIS was issued on December 21, 2006; the comment period for the Draft EIS ended on February 2, 2007. Cascade received written comments on the Draft EIS from federal, state, and local agencies; from the tribes; from non-governmental organizations; and from private citizens.

Table F-1 lists the name of the entity or individual who submitted comments, the assigned comment numbers, and the location(s) in the Final EIS where those comments were addressed.

Table F-1: Comment Origin and Location of Response

Comments received from:	Assigned comment numbers:	See these sections for response:
Bonneville Power Administration (BPA)	1 – 3	• Appendix F, Page F-7
Department of Archaeology & Historic Preservation (DAHP)	1 – 3	• Appendix F, Page F-11
Reagan Dunn and James and Kathleen Doman	1 –11	• Appendix F, Page F-19
Eglick Kiker Whited PLLC	1 – 4	• Appendix F, Page F-45
Issaquah Environmental Council	1 – 36	• Appendix F, Page F-55 • Revised text: Sections 1.1, 6.1.1, 8.1.1, 8.1.2; Table 5-12
City of Kent Public Works Department	1 – 14	• Appendix F, Page F-63 • Revised text: Sections 1.1, 5.1.1, 8.1, 8.1.1, 8.1.2, 8.3.3; Table 8-1; Appendix B
King County Department of Development and Environmental Services (DDES)	1	• Appendix F, Page F-67
King County Department of Natural Resources and Parks	1 – 22	• Appendix F, Page F-75
Joe and Elizabeth Miles	1 – 9	• Appendix F, Page F-85
Muckleshoot Indian Tribe	1 – 28	• Appendix F, Page F-93 • Revised text: Sections 1.1, 5.1.1, 5.1.2, 5.1.3, 5.1.4, 5.1.5, 5.1.6, 6.1.1, 6.1.2, 6.2.2; Tables 5-1, 5-12, and 6-1
City of Newcastle	1 – 3	• Appendix F, Page F-99

Comments received from:	Assigned comment numbers:	See these sections for response:
City of Renton	1 – 7	• Appendix F, Page F-103
Val Shrauner	1 – 4	• Appendix F, Page F107

Department of Energy

Bonneville Power Administration
P.O. Box 61409
Vancouver, WA 98666-1409

January 22, 2007

In reply refer to: Cascade Water Alliance Pipeline Draft EIS comments

To Mr. Michael A. Gagliardo, General Manager,

As a federal government agency, BPA needs to make a decision under the National Environmental Policy Act (NEPA) of 1969, as amended, before issuing a land use agreement to allow construction to take place on BPA fee-owned land. Before doing so we would need to comply with Section 106 of the National Historic Preservation Act, and consult with the affected tribes in the area as part of our Trust responsibility that we have with them. Additionally, we would need to comply with the Endangered Species Act as well as other federal legislation. Please be aware that this process can take up to 90 days to complete and is required before a land use agreement can be issued. Having said this, we would like to submit the following scoping comments:

1. National Historic Preservation Act
We request that you hire a qualified cultural resource consulting firm to undertake a cultural resource survey (on the ground) of the proposed action on BPA fee-owned property at Covington, a survey we would use in meeting our federal responsibilities under the NHPA. 1

2. Endangered Species Act.
We request that you prepare a biological assessment (BA) that addresses all of the federally-listed and proposed species, designated and proposed critical habitats, and essential fish habitat (EFH) that could be found in the project area. We would expect the BA to include an accurate description of the proposed action, analysis of anticipated impacts, including cumulative impacts and recommended mitigation and/or conservation measures that would be proposed to either eliminate impacts or reduce them to their lowest levels. 2

So that this material (BA and cultural resource survey) meets our need in consulting with the appropriate federal and state regulatory agencies and Indian tribes, we would be happy to review and comment in their creation. Please let us know when you are ready to prepare the information. 3

Sincerely,

Danna Vermeers
djvermeers@bpa.gov
Phone: 360-619-6333
Fax: 360-619-6983

Response to Comments from the Bonneville Power Administration (BPA)

Comment Number	Response
1	Thank you for your comments regarding the proposed Tacoma–Cascade Pipeline (TCP). Comment noted. Historical Research Associates, Inc. has been retained to conduct any cultural resource survey required for the TCP. All work would be coordinated with the BPA to ensure that the work would meet National Historic Preservation Act requirements.
2	A biological assessment addressing all of the federally-listed and proposed species, designated and proposed critical habitats, and essential fish habitat will be prepared and submitted to the BPA for review.
3	Thank you for your offer of assistance. Cascade will consult with the BPA in the development of the cultural resource survey and biological assessment.

STATE OF WASHINGTON

DEPARTMENT OF ARCHAEOLOGY & HISTORIC PRESERVATION

1063 S. Capitol Way, Suite 106 • Olympia, Washington 98501
Mailing address: PO Box 48343 • Olympia, Washington 98504-8343
(360) 586-3065 • Fax Number (360) 586-3067 • Website: www.dahp.wa.gov

January 3, 2007

Mr. Michael A. Gagliardo
Cascade Water Alliance
1400 112th Avenue SE, Suite 220
Bellevue, Washington 98004

Re: Tacoma-Cascade Pipeline
Log No.: 010307-01-COE-S

Dear Mr. Gagliardo;

Thank you for contacting our department. We have reviewed the Draft Environmental Impact Statement (DEIS) you provided for proposed Tacoma-Cascade Pipeline Project in Pierce and King Counties, Washington.

We concur with your identification of historic and arcaheological resources as a topic in your analysis. We would appreciate receiving copies of the two reports authored by Historic Research Associates, Inc that are referenced in the text. We understand federal permits are required and we look forward to receiving additional information and consultation under the requirements of the National Historic Preservation Act (NHPA) and its implementing regulations 36CFR800. 1

These comments are based on the information available at the time of this review and on behalf of the State Historic Preservation Officer in compliance with the Section 106 of the National Historic Preservation Act, as amended, and its implementing regulations 36CFR800.4. 2

We would also appreciate receiving any correspondence or comments from concerned tribes or other parties that you receive as you consult under the requirements of 36CFR800.4(a)(4). Should additional information become available, our assessment may be revised. Thank you for the opportunity to comment and we look forward to receiving further information. 3

Sincerely,

Robert G. Whitlam, Ph.D.
State Archaeologist
(360) 586-3080
email: rob.whitlam@dahp.wa.gov

Response to Comments from the Department of Archaeology & Historic Preservation (DAHP)

Comment Number	Response
1	Thank you for your comments regarding the proposed Tacoma–Cascade Pipeline. Copies of the two reports authored by Historic Research Associates, Inc. were sent to the DAHP via a letter dated February 27, 2007. Cascade will continue to provide National Historic Preservation Act related information to, and consult with, the DAHP as the project progresses.
2	Comment noted.
3	Comment noted. Cascade will provide any correspondence or comments received from concerned tribes or other parties as we consult under the requirements of 36 CFR 800.4(a)(4).

REAGAN DUNN
Metropolitan King County Council, District Nine

January 11, 2007

The Honorable Grant Degginger, Chair
Cascade Water Alliance
Bellefield Office Park, Careage Building
1400 112th Ave. SE, Suite 220
Bellevue, WA 98004

Dear Mayor Degginger,

I am writing to express some concerns raised by my constituents regarding the Cascade Water Alliance's Tacoma-Cascade pipeline. I understand that we are still in the EIS scoping process, and it is my intent to have these issues addressed as part of this process. 1

I am enclosing a letter from James & Kathleen Doman that outlines their concerns with one of the pipeline's proposed routes. The issues that they bring up deal both with public safety and the protection of their personal property. 2

The Tacoma-Cascade pipeline is a project vital to our region. As a member of the Regional Water Quality Committee, I look forward to continual updates in our briefings. My comments should not be construed as a desire to slow the construction process or oppose the project in any way. I only wish to ensure that the chosen route addresses the concerns of all citizens who may potentially impacted by this project and protects the quality of life of my constituents for years to come. 3

If you have any questions or want to clarify issues covered in this letter, please contact my Legislative Aide, Neil Strege, at (206) 296-1009. Thank you for your consideration of my comments.

Best regards,

Reagan Dunn
King County Councilman
District Nine

Cc: James & Kathleen Doman
22724 156th Ave. SE
Kent, WA 98042

King County Courthouse, Room 1200, 516 Third Avenue, Seattle, WA 98104-3272
206-296-1009 TTY/TDD 206-296-1024 FAX 206-205-5652
reagan.dunn@metrokc.gov www.metrokc.gov/dunn

COPY
NOV 29 2006

September 14, 2006

King County Councilman
Regan Dunn
516 Third Ave. Room 1200
Seattle, Washington 98104-3272

Subject; Cascade Regional Water Supply System
Tacoma-Cascade Pipeline

Councilman Dunn;

I attended an "EIS Scoping Meeting" September 13th. At this meeting four routes for the middle route of this pipeline were presented, however it became evident that only one route, the red route north from Kent Black Diamond road through Covington continuing up 156th Ave SE-SE 224th Street-148th Ave SE, was going to be selected. A review of the 2005 Annual Report of Cascade Water Alliance (page 4 first paragraph third sentence and map on page 10 orange route) shows that this route was selected in 2005 or perhaps as early as 2001. Two of the remaining routes, blue and green, are through the City of Kent who receives no benefit from this pipe line and therefore have no interest in their citizens having to put up with the construction problems. 4

The majority of this red route pipeline is in unincorporated King County described in annual report as "rural horse-acre properties". As such it appears that the opinions and input of the residents in this area have not been considered by Cascade Regional or King County. All of the roads to be used by the red route are narrow two lane roads with narrow or non existing shoulders. With all the development to the east of us, traffic has increased greatly in the past several years and there are very few alternate routes to be used during the construction. 5

There is limited fire fighting support in this area and I was advised at the above meeting that this is a transmission water line and therefore fire hydrants will not be included. At this time it appears that we residents of unincorporated King County will be recipients of all the inconvenience and mess without any benefits. 6

If this project proceeds, which it appears it will, there is a culvert under 156th Ave Se which carries water runoff from the high ground west of 156th Ave SE directly onto our property. This culvert was incorrectly located many years ago. During the pipeline construction process this culvert should be eliminated and the water directed along the west side of 156th Ave Se north to SE 224 Street to discharge into an existing drainage system. This correction was partly done years age however has not been maintained by King County road department. 7

What is King County's position on this construction project and its impact on the residents of this area?

James & Kathleen Doman 253-631-4356
22724 156th Ave. SE
Kent, Washington 98042-4004

1

COPY
Nov 29 2006

September 17, 2006

Mr. Dennis Fields
Cascade Water Alliance
1400 112th Ave. SE Suite 220
Bellevue, Washington 98004

Mr. Fields;

I attended the EIS Scoping meeting September 13th at Maywood Middle School, located well outside the area of the "central segment" pipeline project. The following are additional comments regarding the Tacoma-Cascade pipeline project.

1. I object to the red route due to the narrow roads and road shoulders to be used for the pipeline. Because of the increased development east of the proposed route and the limited alternate traffic routes available for traffic movement east and west, traffic congestion will be a major problem. I don't believe the residents of the red route have been given proper opportunity to be aware of or make comments on this project. 8

2. A review of your map of the "central segment" shows the red route transiting from 148th Ave SE to SE 192nd Street then to 104th Ave SE. A major construction project redoing 104th Ave SE was just completed and tearing it up to install your pipeline is just a waste of taxpayer monies. The pipeline should continue north on 148th Ave SE to connect with the Seattle Lake Young's right of way and continue northwest on that right of way to intersect 104th Ave SE and then continue as planed. This would eliminate much of the new 104th Ave SE from your construction project. 9

3. At the meeting I inquired about installing fire hydrants along the pipe line as there is no firefighting support in this area and was advised that being a transmission line this was not possible. A way should be found to accomplish this so that we residents will receive some benefit from all the inconvenience that this project will cause. 10

4. The residents of the central segment project area need an opportunity to meet with Cascade Regional Water Supply System to discuss this project. This meeting should take place in this area, perhaps at the Covington library, so that all will have an opportunity to learn of this project. 11

James Doman
22724 156th Ave. SE
Kent, Washington 98042-4004

Response to Comments from Reagan Dunn and James and Kathleen Doman

Comment Number	Response
1	Thank you for your comments regarding the proposed Tacoma–Cascade Pipeline (TCP), and for forwarding the comments from James and Kathleen Doman. Comment noted.
2	Comment noted.
3	Comments noted.
4	The Preferred Alternative (Red Route) that is described in the Draft EIS has been advanced as the "staff-preferred" alternative for the TCP. Cascade's 2005 Annual Report also referred to the route (depicted as orange and light green in the Annual Report) as the "preferred" route. However, the Preferred Alternative has not been approved by the Cascade Board. The Cascade Board will select a final route alternative at the conclusion of the EIS process. Please see the City of Kent Comment No. 3 (Appendix F): "Page 1-1 [of the Draft EIS] identifies a turn-out from Kent to provide water to Kent in the event of an emergency. Though the City has expressed interest in a turnout, agreements are not in place to finalize the turnout."
5	Public outreach is important to Cascade (see Section 1.3 of the Draft EIS). Several meetings were held in 2005 and 2006 to obtain input from residents and businesses along the alternative routes being investigated for the TCP. It is recognized that many of the road segments along the Preferred Alternative (Red Route) are two-lane roads. Cascade is concerned about traffic disruptions that could occur during construction of the TCP regardless of which route is ultimately approved. Cascade would work closely with local jurisdictions during the permitting phase of the project to identify detours and mitigation measures that would help minimize impacts to traffic.
6	The TCP would be a water transmission pipeline, and as such, would not include fire hydrants. Each local water purveyor is responsible for serving the customers in its service area, including providing domestic drinking water and fire protection. The pressure at which water is delivered in a transmission line is very high, in excess of fire hydrant capacity. Therefore, any fire hydrants attached directly to a transmission line require a meter and pressure reducing valve station. This would be very costly for single hydrant installation. For these reasons, fire hydrants are typically not installed on transmission pipelines. Regardless of which alternative route is ultimately approved, the TCP would be a vital component of the region's water supply system, providing increased reliability and flexibility in its operation.
7	Survey and base mapping would show approximate locations of the culvert. The Preferred Alterative (Red Route) would occupy the northbound lane of 156th Avenue SE and cross under the subject culvert. The culvert is a King County facility and it is King County's responsibility to maintain or modify the culvert. The contractor would be required to protect the culvert during pipeline installation and restore surfaces to original preconstruction conditions. This project would not be responsible for repairing pre-existing drainage problems or deficiencies.
8	The Red Route has been advanced as the Preferred Alternative in part because many of its roadways have low traffic counts compared with those of the Green Route Alternative. Most of the Preferred Alternative (Red Route) would be located along two-lane roads with standard 11-foot or 12-foot-wide lanes, with varying shoulder widths. Traffic detours would be designed and coordinated with the local jurisdiction to minimize traffic impacts and maintain safety. The public would receive advance notification about construction operations. See Response No. 5 regarding public outreach and opportunity to comment.

Comment Number	Response
9	A route along 148th Avenue SE around the Lake Youngs reserve and along Tunnel Road was considered by Cascade and proposed to Seattle Public Utilities (SPU). SPU owns the right-of-way in fee and will not allow another transmission pipeline on SE 171st Street (Tunnel Road) from Lake Youngs to 140th Avenue SE. Other complications of this route would be constructing the pipeline through residential neighborhoods with shallow sewers, and crossing Petrovitsky Road at this location.
10	See Response No. 6.
11	As noted in Response No. 5, several meetings were held in 2005 and 2006 to obtain input from the public and businesses along the alternative routes for the TCP. Cascade plans to continue its public outreach program during the permitting and construction phases of the project. Meetings were previously held at the offices of the Covington Water District. Use of that location as well as the Covington library will be considered for future meetings, as appropriate.

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February 1, 2007

SENT VIA FACSIMILE AND U.S. MAIL

Michael A. Gagliardo, General Manager
Cascade Water Alliance
1400 112th Avenue SE, Suite 220
Bellevue, Washington 98004

Re: City of Auburn's Comments on Draft EIS for Tacoma-Cascade Pipeline

Dear Mr. Gagliardo:

For several years now, the Cascade Water Alliance ("Cascade") has pursued development of Lake Tapps as a source of municipal water supply in violation of the State Environmental Policy Act by improperly segmenting the project to avoid preparation of a programmatic environmental impact statement and failing to consider alternatives to the development of Lake Tapps.[1] Equally inappropriate, Cascade has failed to consider the impacts the proposed development of Lake Tapps will have on water purveyors within the basin and has failed to work in good faith with such purveyors, including the City of Auburn ("Auburn"), to address outstanding concerns. If Cascade continues on its present course, Auburn will be left with no alternative but to again bring these and its other concerns before the Pollution Control Hearings Board for resolution. 1

In an oblique acknowledgment that it is improperly piecemealing its SEPA review, Cascade states in its latest SEPA document for the Tacoma-Cascade Pipeline ("TCP"):

> The TCP is one component of the Cascade Regional Water Supply System (CRWSS) and would be the first principal project feature of the CRWSS to be constructed. However, it has the ability to operate independently of any other planned components. The TCP is not dependent upon construction of any other pipeline or acquisition of any other water resource to accomplish its intended purpose.

[1] Auburn incorporates by reference its prior SEPA comment letters dated March 16, 2006, May 9, 2005, and March 17, 2003, copies of which are attached. 2

December 21, 2006, Draft EIS: Tacoma-Cascade Pipeline, Section 1.2 at page 1-2. However, Cascade's conclusory statement misses the point entirely.

While the TCP may be technically capable of operating to a limited degree and for a limited duration independent from other elements of the Cascade Regional Water Supply System, the TCP is, nonetheless, integrally connected to Cascade's larger plan to develop Lake Tapps. Not only are the TCP routes designed around the proposed development of Lake Tapps, but it is obvious that the TCP would not be rationale or economically feasible were it not an interconnected part of the Lake Tapps development. This is simply another instance of Cascade compartmentalizing its true proposal to avoid an honest assessment of the environmental impacts at issue.[2] 3

Auburn again asks Cascade to revisit the environmental review process adopted for the proposed development of Lake Tapps and again invites Cascade to work with it toward resolving the many outstanding concerns that remain with respect to the proposal. 4

Respectfully,

EGLICK KIKER WHITED PLLC

Peter J. Eglick
Joshua A. Whited
Attorneys for City of Auburn

Enclosure

cc: Michael Ruark (via facsimile and electronic mail)
Daniel B. Heid, Auburn City Attorney

[2] Proposals are closely related, such that they should be evaluated in the same environmental document, if they are "interdependent parts of a larger proposal and depend on the larger proposal as their justification or for their implementation." WAC 197-11-060(3)(b)(i).

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March 16, 2006

SENT VIA FACSIMILE AND U.S. MAIL

Michael A. Gagliardo, General Manager
Cascade Water Alliance
1400 112th Avenue SE, Suite 220
Bellevue, Washington 98004

Re: Comments on Scope of EIS for Central Segment Transmission Pipeline

Dear Mr. Gagliardo:

From its inception, the Cascade Water Alliance's "plan" to develop Lake Tapps as a source of municipal water supply has been characterized by an absence of adequate planning and analysis.[1] Not only has Cascade consistently and repeatedly failed to comply with core requirements of the State Environmental Policy Act by, for example, improperly segmenting the project to avoid preparation of a programmatic environmental impact statement, but it has also failed to consider important issues such as alternatives to the development of Lake Tapps and the ramifications of exporting significant quantities of water away from its "home" basin, including impacts on water purveyors within such basin.

Cascade's current determination of significance and the upcoming environmental impact statement for the Central Segment Transmission Pipeline are illustrative of Cascade's flawed approach. Again, rather than preparing a programmatic environmental impact statement that considers the impacts of developing Lake Tapps, alternatives to such development, and the core regional water supply planning issues raised by the proposal, Cascade has limited its focus to a segment of pipeline that is part of a much larger proposal.

In keeping with the requirements of the State Environmental Policy Act, Auburn again urges Cascade to expand the scope of the upcoming environmental impact statement to address the proposal which is truly at issue: the development of Lake Tapps

[1] Auburn has brought these shortcomings to Cascade's attention through prior SEPA comment letters dated May 9, 2005 and March 17, 2003, copies of which are attached and fully incorporated herein. These shortcomings are also the subject of two separate SEPA lawsuits now pending in King County Superior Court.

by Cascade for municipal water supply purposes. In so doing, Cascade should identify impacts of the proposed water supply project, alternatives to the proposed project and give due consideration to the exportation of significant quantities of water from its "home" basin.

As always, Auburn invites Cascade to work with it to resolve these significant issues which will shape the Puget Sound region's water supply for decades to come.

Respectfully,

EGLICK KIKER WHITED PLLC

Peter J. Eglick
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Attorneys for City of Auburn

Enclosure

cc: Michael Ruark (via facsimile and electronic mail)
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May 9, 2005

VIA FACSIMILE, ELECTRONIC MAIL, AND MESSENGER DELIVERY

Michael A. Gagliardo, General Manager
Cascade Water Alliance
1400 112th Avenue SE, Suite 220
Bellevue, Washington 98004

RE: Comments on SEPA DNS for Cascade's Draft Transmission and Supply Plan

Dear Mr. Gagliardo:

INTRODUCTION

As you know, the City of Auburn is a major water purveyor located in southern King County and northern Pierce County. Lake Tapps is located just south of the City and the White River, which feeds Lake Tapps, flows across the southern portion of the City. Auburn's water rights are in hydraulic continuity with the White River and Lake Tapps. As a result, the removal of large amounts of water from the White River and/or Lake Tapps, will negatively impact Auburn's existing water rights and will also very likely foreclose (or at least hamper) future attempts by Auburn to obtain water rights from these and related sources.

Auburn's water system serves 12,014 direct service connections, including parcels owned by the Muckleshoot Indian Tribe; these connections represent a total population of approximately 45,000. In addition, the City is responsible for providing water on a wholesale account basis to neighboring jurisdictions. It is anticipated that the City will be serving water to a population of 63,800 by the year 2020 (not including existing or future wholesale water customers). It is in this context that the City of Auburn submits the following comments on the SEPA DNS issued by the Cascade Water Alliance ('Cascade") for Cascade's Draft Transmission and Supply Plan ("TSP")—a plan which will undoubtedly have significant unmitigated adverse

environmental impacts and clearly warrants the preparation of an environmental impact statement ("EIS").

1. **Cascade has a firm plan to develop Lake Tapps for municipal water supply.**

For several years now, Cascade has been working on a plan to develop Lake Tapps for municipal water supply. As early as August 7, 2001, Cascade entered into a memorandum of understanding with Puget Sound Energy to obtain the exclusive right to negotiate with Puget to acquire the potential Lake Tapps water rights. In September 2002, Cascade purported to adopt an "Action Plan," which included development of Lake Tapps as a primary water supply element. On January 29, 2003, Cascade purported to adopt its Regional Plan for Water Supply which stated that the Lake Tapps reservoir is "essential" for meeting the long term needs of Cascade's members. On March 18, 2003, Cascade purportedly issued a SEPA Notice of Action stating its intent to amend its Regional Plan for Water Supply to authorize development of the Lake Tapps Reservoir Water Right Proposal and execution of an agreement with Puget Sound Energy for acquisition of Lake Tapps water rights.[1]

When Puget Sound Energy applied for the Lake Tapps water rights, Cascade invested more than 2 million dollars in the application process; when the water rights were challenged, Cascade actively participated in and funded the defense before the PCHB. Cascade promised to pay another 3 million dollars for the exclusive right to negotiate with PSE for the purchase of the Lake Tapps water rights. In fact, Cascade has publicly stated:

> Cascade is a combination of municipality's whose *operating principle has been development of these water rights* for public use. Puget may be the applicant of record, but Cascade provided the municipal justification for these rights. As this application process developed, *Cascade was no less an applicant than Puget* and treated by Ecology as such.

Cascade Water Alliance's Motion to Intervene in *Puyallup Tribe of Indians et al. v. Ecology et al.*, PCHB Nos. 03-105, 03-107, 03-109, and 03-118, dated January 8, 2004 (emphasis added).

Most recently, on April 28, 2005, Cascade and Puget Sound Energy issued a joint press release indicating that they "have agreed on the key terms and conditions for a sale of Lake

[1] Auburn commented on the environmental checklist and MDNS for this proposal as well. Auburn fully incorporates its prior comments herein by reference. For your convenience, a copy of Auburn's March 17, 2003 comment letter is attached.

Tapps to Cascade. The two parties said they'll now work to complete the final agreement on the property transaction by August." Joint Cascade/PSE Press Release dated April 28, 2005. Under the agreement, Cascade has committed to pay Puget between $10 and $37 million (the exact amount depends on the extent to which the source can be exploited for drinking water). *Id.*

Cascade's draft TSP continues to recognize Cascade's firm plan to utilize Lake Tapps for municipal water supply:

- "Cascade's preferred option is development of the Lake Tapps Resevoir in Pierce County as a long-term source of municipal water supply." TSP at 7-1, ll. 30-31.
- "Cascade will continue to work toward development of the Lake Tapps source." TSP at 7-1, ll. 35.
- "Currently, the preferred long-term option, as depicted in these figures, is to utilize Lake Tapps." TSP at 7-3, ll. 18-19.
- "Cascade's preferred source of supply for the long term after 2023 is the Lake Tapps Reservoir in Pierce County. . . " TSP at 7-19, ll. 8-9.
- "Legal procedures and agreements must be completed before the development of Lake Tapps as a source can occur." TSP at 7-19, ll. 11-12.
- "Cascade will work exclusively with PSE to develop a proposal to acquire all or potions of the water rights PSE obtains under the pending Ecology water rights application." TSP at 7-19, ll. 13-14.
- "The Lake Tapps Water Supply Project is proposed to meet long-term demands after 2023. Section 8 provides additional descriptions of Lake Tapps facilities and the proposed capital improvements." TSP at 7-19, ll. 24-25.

Even the supply and demand analyses in the TSP assume that Lake Tapps will be developed and utilized as a source of supply by Cascade to meet the purported needs of its members. *See, e.g.*, TSP at Figures 7-1 & 7-2; Table 7.1. The TSP expressly adopts the assumption that:

> The Lake Tapps source of supply is developed for long term needs.

TSP at 7-2, ll. 25.

The TSP discusses "Reliability Considerations for Lake Tapps," pointing to modeling completed by HDR in support of Ecology's 2003 ROE,[2] and then goes on to identify, in great detail, the infrastructure and capital improvements associated with the Lake Tapps project, explaining:

> In the long term, Cascade intends to develop Lake Tapps as a source of supply. This Transmission and Supply Plan (TSP) anticipates construction of Lake Tapps will occur in 2024. This is beyond the 20-year planning horizon that is the main focus of this plan. **[Note: The preceding statement is incorrect. If the Lake Tapps project is constructed in 2024, it will be within the 20-year planning horizon which runs from 2005 to 2025. Accordingly, Cascade's TSP fails to comply with WAC 246-290-100(4) which requires that water system plans cover 20 years into the future.]** However, capital improvements associated with Lake Tapps are discussed in this plan for two reasons. First the configuration of transmission infrastructure needed to deliver TSSP water purchased from TPU is best understood in the context of anticipated capital projects needed later for Lake Tapps. Second, in order for Lake Tapps to be brought online in 2024, the required treatment and transmission infrastructure must be planned, permitted and constructed prior to that time.

TSP at 8-1, ll. 9-16. The TSP indicates that the Lake Tapps project will require construction of a water treatment plan, pump stations, and additional transmission pipelines, and specifically identifies the alternative transmission systems that are being considered, including their routes. TSP at 8-3 through 8-8. The necessary capital improvements (and associated costs) are also identified in great detail. For example, Phase 1 alone of development for Lake Tapps is estimated at a staggering $110 to $130 million.

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[2] The PCHB determined that the ROE and associated modeling were inadequate because they assumed continued hydropower operation—a baseline scenario which is no longer present. See *Puyallup Tribe of Indians et al. v. Ecology et al.*, PCHB Nos. 03-105, 03-107, 03-109, and 03-118, Order Remanding Case, dated August 12, 2004. Notably, utilization of water for hydropower purposes is drastically different from domestic use, particularly where the water is being transferred out of basin. Cascade's reliance on this old modeling is seriously misplaced.

2. **The latest DNS continues Cascade's improper segmentation of the Lake Tapps project to avoid evaluation of cumulative impacts which clearly warrant preparation of an EIS.**

Despite its firm and detailed plan, Cascade has consistently refused to evaluate the environmental impacts associated with the development of Lake Tapps. Instead, it has improperly segmented the project to avoid consideration of the project's cumulative impacts. In earlier SEPA documents, Cascade indicated that development of Lake Tapps would undergo "phased" review, claiming that it did not yet know enough about the project to consider its environmental impacts, despite the mature body of information it has offered in other contexts. *See, e.g.,* Lake Tapps Storage Resevoir Water Right Proposal Environmental Checklist, dated February 10, 2003. In the current SEPA DNS for Cascade's TSP, there is no specific mention of "phased" review.[3] Instead, Cascade maintains that:

> Project Actions referenced in the Plan that have environmental impacts associated with the construction, maintenance, and operation of those site-specific projects either *have been or will be* evaluated under SEPA during the project review process.

2004 Transmission and Supply Plan Environmental Checklist, dated March 24, 2005 at 5 (emphasis added).

If and when the Lake Tapps project proceeds to construction, Cascade will undoubtedly rely on these prior SEPA determinations (including the current DNS for the TSP) to justify a less exhaustive environmental review. Under Cascade's approach, "now" is <u>never</u> the time to provide a comprehensive, coherent environmental review of its plan. The cumulative impacts of the Lake Tapps project will never be considered while Cascade invests substantial time, energy and resources into the project culminating in what it hopes will be a foregone conclusion. Fortunately, SEPA prohibits such an approach.

Under SEPA, agencies "shall be certain" that they properly define the proposal at issue. WAC 197-11-060(3)(a). Agencies are to describe proposals in ways that

[3] Under WAC 197-11-060(5)(e), "When a lead agency knows it is using phased review, it shall so state in its environmental document."

> . . . encourage considering and comparing alternatives. Agencies are encouraged to describe public or nonproject proposals in terms of objectives rather than preferred solutions.

WAC 197-11-060(3)(a)(iii). "Proposals or parts of proposals that are related to each other closely enough to be, in effect, a single course of action shall be evaluated in the same environmental document." WAC 197-11-060(3)(b). Proposals or parts of proposals are closely related if they "[c]annot or will not proceed unless the other proposals (or parts of proposals) are implemented simultaneously with them" or if they are "interdependent parts of a larger proposal and depend on the larger proposal as their justification or for their implementation." WAC 197-11-060(3)(b)(i).

Although "phased" review is allowed under limited circumstances, phased review is not appropriate when:

> (ii) It would merely divide a larger system into exempted fragments or avoid discussion of cumulative impacts; or
>
> (iii) It would segment and avoid present consideration of proposals and their impacts that are required to be evaluated in a single environmental document under WAC 197-11-060(3)(b). . .

WAC 197-11-060(5).

The Washington Supreme Court has held that when a non-project action will likely result in future development, the future development must be considered as part of the proposal under SEPA—"even if development is not the direct and immediate result of the government action." *King County v. Washington State Boundary Review Board for King County*, 122 Wn.2d 648, 662-63, 860 P.2d 1024 (1993). The Court explained:

> One of SEPA's purposes is to provide consideration of environmental factors at the earliest possible stage to allow decisions to be based on complete disclosure of environmental consequences. Decision-making based on complete disclosure would be thwarted if full environmental review could be evaded simply because no land-use changes would occur as a direct result of a proposed government action. Even a boundary change, like the one in this case, may begin a process of government action which can "snowball" and acquire virtually unstoppable administrative inertia. See Rodgers, The Washington Environmental Policy Act, 60 Wash.L.Rev. 33, 54 (1984) (the risk

> of postponing environmental review is "a dangerous incrementalism where the obligation to decide is postponed successively while project momentum builds"). Even if adverse environmental effects are discovered later, the inertia generated by the initial government decisions (made without environmental impact statements) may carry the project forward regardless. When government decisions may have such snowballing effect, decisionmakers need to be apprised of the environmental consequences before the project picks up momentum, not after.
>
> We therefore hold that a proposed land-use related action is not insulated from full environmental review simply because there are no existing specific proposals to develop the land in question or because there are no immediate land-use changes which will flow from the proposed action. Instead, an EIS should be prepared where the responsible agency determines that significant adverse environmental impacts are probable following the government action.

Id. at 663-64 (emphasis added) (internal citations and footnotes omitted).

The Lake Tapps project is exactly the type of "snowballing" project against which the Washington Supreme Court cautioned. As Cascade itself acknowledges, Cascade's operating principle is development of Lake Tapps. *See* Cascade Water Alliance's Motion to Intervene in *Puyallup Tribe of Indians et al. v. Ecology et al.*, PCHB Nos. 03-105, 03-107, 03-109, and 03-118, dated January 8, 2004 (emphasis added).

Over the last four years, Cascade has steadily marched forward on the path to development of Lake Tapps, adopting and amending plans, authorizing multi-million dollar expenditures, participating in litigation, and ultimately coming to terms with Puget on the purchase of Lake Tapps for $10 to $37 million dollars. The TSP which Cascade is now pursuing is an "interdependent part" of the larger proposal to develop Lake Tapps and the Lake Tapps project is clearly the justification for the TSP. Cascade is inappropriately piecemealing or segmenting the actual project in order to skirt full environmental review and avoid the

consideration of cumulative impacts.[4] This violates WAC 197-11-060(3) and WAC 197-11-060(5).

Even if "phased" review were allowed in this case (it is not), Cascade has not even met the minimum requirements envisioned by SEPA for plans such as the TSP. Under "phased" review, WAC 197-11-060(5)(g) provides in relevant part:

> Where proposals are related to a large existing or planned network, such as highways, streets, pipelines, or utility lines or systems, the lead agency may analyze in detail the overall network as the present proposal or may select some of the future elements for present detailed consideration.

WAC 197-11-(5)(g). In this case, Cascade has not given "detailed consideration" to the overall water supply network or to future elements of the water supply network. Instead, as discussed more thoroughly in the next section, Cascade has "prepared" a grossly incomplete environmental checklist which fails to provide any detailed consideration of the TSP or its elements.

3. **The Environmental Checklist is grossly incomplete and contains material errors.**

Under WAC 197-11-335, Cascade "shall make its threshold determination based upon information reasonably sufficient to evaluate the environmental impact" of its proposal. *See* WAC 197-11-335. The Washington Supreme Court has explained:

> . . . the record must demonstrate that environmental factors were considered in a manner sufficient to amount to prima facie compliance with the procedural requirements of SEPA and that the decision . . . was based on information sufficient to evaluate the proposal's environmental impact.

---

[4] In light of Cascade's existing administrative record related to the Lake Tapps project, portions of which are detailed in the preceding section, any claim that the project is too speculative or not sufficiently fleshed out for environmental review is simply not credible. WAC 197-11-055(2)(a)(i) recognizes that:

> The fact that proposals may require future agency approvals or environmental review shall not preclude current consideration, as long as proposed future activities are specific enough to allow some evaluation of their probable environmental impacts.

WAC 197-11-055(2)(a)(i).

Wenatchee Sportsmen Association v. Chelan County, 141 Wn.2d 169, 176, 4 P.3d 123 (2000) (citations omitted).

In making its decision, the responsible official relies upon the information disclosed in the environmental checklist. *See, e.g.*, WAC 197-11-330; WAC 197-11-960. The checklist is to be completed "accurately and carefully" and the "checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land." WAC 197-11-960 (emphasis added). In the rare instances where a question does not apply to the proposal, the applicant must write "does not apply." WAC 197-11-960.

Under SEPA, the environmental checklist must be completed for nonproject and sell as project proposals. WAC 197-11-960 provides, in relevant part:

> Complete this checklist for nonproject proposal, even though questions may be answered "does not apply." IN ADDITION, complete the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D).

WAC 197-11-960 (emphasis in original). Ecology's *State Environmental Policy Act Handbook* also makes it very clear that the **both** the environmental checklist **and** the supplemental sheet are to be fully completed:

> The procedural requirements for SEPA review of a nonproject proposal are basically the same as a project proposal. . . The first step is usually to complete an environmental checklist (including Part D, Supplemental Sheet for Nonproject Activities), unless the lead agency has already determined that an an environmental impact statement is needed or SEPA has already been completed.

State Environmental Policy Act Handbook (SEPA Handbook), Washington State Department of Ecology Publication #98-114 (September 1998, updated 2003) at 66. If the nonproject action "is a comprehensive plan or similar proposal that will govern future project development, the probable impacts need to be considered of the future development that would be allowed." *Id.*

Cascade's environmental checklist does not even begin to meet the standards of disclosure required for an environmental checklist. Not only does the checklist completely fail to address the environmental impacts associated with major parts of the proposal, including the development of Lake Tapps for municipal water supply, but the checklist is, as a whole, grossly incomplete.

Cascade erroneously maintains that:

> Section B, Environmental Elements, which applies to specific Project Actions is not applicable to the proposed adoption of Cascade's Plan. Please refer to Section D, Supplemental Sheet for Non-Project Actions, which provides general programmatic-level environmental impact information.

2004 Transmission and Supply Plan Environmental Checklist, dated March 24, 2005 at 5. Cascade then proceeds to skip entirely all questions contained in Section B of the Environmental Checklist—the only section of the checklist that is substantively focused on environmental impacts. By refusing to answer or even consider the environmental issues raised by the 75+ questions in Section B, Cascade has essentially taken the position that nonproject actions do not require environmental review under SEPA.

Cascade's position is in direct violation of WAC 197-11-960 and Ecology's SEPA Handbook. If nonproject proposals were exempt from Section B—the core section of the environmental checklist—the regulations would say so. Instead, the regulations and the SEPA Handbook recognize that Section D is merely a **supplemental** section and that nonproject proposals are subject to the same disclosure requirements as project proposals.

Cascade's completion of supplemental Section D does nothing to rectify its failure to identify environmental impacts in Section B. In fact, throughout the minimal 4 pages of Section D, Cascade does nothing more than state in the most general of terms that environmental impacts could occur and that it would try to avoid impacts. Even Cascade acknowledges that Section D discusses "potential impacts in a very general manner." 2004 Transmission and Supply Plan Environmental Checklist, dated March 24, 2005 at 15 (emphasis added). Cascade's record here does not even begin to demonstrate that "environmental factors were considered in a manner sufficient to amount to prima facie compliance with the procedural requirements of SEPA and that the decision . . . was based on information sufficient to evaluate the proposal's environmental impact." *Wenatchee Sportsmen Association v. Chelan County*, 141 Wn.2d 169, 176, 4 P.3d 123 (2000).

Cascade's checklist is also less than forthcoming. For example:

- Section A, Question 10 asks Cascade to list any government approvals or permits that will be needed. In its response, Cascade does not mention any of the many permits and approvals that will be necessary to implement its plan. It will obviously need, among other things, water right permits to utilize Lake Tapps, construction permits to build the pipelines, drinking water certifications to utilize the water for such purpose, NPDES permits for its discharges and construction, etc.

- Section D, Question 7 asks whether the proposal "may conflict with local, state, or federal laws or requirements for the protection of the environment." Cascade boldly answers that "Transmission and water supply projects identified in the Plan do not and will not conflict with local, state, or federal laws or requirements for the protection of the environment." 2004 Transmission and Supply Plan Environmental Checklist, dated March 24, 2005 at 18. Cascade's response is incorrect. For example, a key part of Cascade's plan is to divert water from the White River and consumptively use that water for municipal water supply. In 1980, Ecology closed the White River to all "further consumptive appropriations," concluding that "further consumptive appropriations would harmfully impact instream values." WAC 173-510-040. Cascade's plan to divert water out of the closed White River directly conflicts with WAC 173-510-040 and there are no exceptions that authorize the diversion. Nor does Cascade address the fundamental legal and policy questions presented by massive export of water resources from their naturally occurring basin.

There are also errors in the TSP itself. For example, on page 3-9, the TSP references Auburn Interlocal Contract #2 and indicates a 0.6 MGD commitment. However, there is no such commitment in Interlocal Contract #2. The commitment for 0.6 MGD is part of the agreement with the Cedar River WSD, as indicated on the same page. In addition, Auburn Resolution #3482, referenced on page 3-9, has been superseded by a subsequent resolution. It is also worth noting that with respect to the City of Covington, the supply shown in section 3.8.5 (page 3-13) exceeds the demand indicated in Covington's comprehensive plan.

4. Significant adverse environmental impacts are probable.

Cascade's environmental checklist does not even begin to consider the environmental impacts associated with pumping 65 million gallons of water a day out of a river system that has been closed to further appropriations, building and operating the infrastructure and capital improvements to transport that water and other water throughout the region, or the impacts of its plan on the region's long term water supply. Cascade acknowledges that its plan (1) could result in pipelines being routed through wetlands and environmentally sensitive areas; (2) could affect plants, animals, and fish; (3) would consume natural resources; (4) would increase demands on transportation, public services, and utilities; and (5) would affect surface waters and could impact air quality. *See* 2004 Transmission and Supply Plan Environmental Checklist, dated March 24, 2005 at 15-18. However, Cascade does not make any substantive disclosures regarding these impacts.

Cascade's plan clearly warrants the preparation of an EIS now. The reality is that all of the impacts which Cascade indicates could or would happen (certainly not an exhaustive list given Cascade's failure to complete Section B and its improper segmentation of the proposal) are

almost certain to happen if Cascade has its way. Cascade's proposal is one of the largest and most significant proposals concerning water resources that could be imagined in the region. Implementation, to which Cascade is already committed and for which Cascade is already planning, will necessitate massive construction activities throughout the Puget Sound region, appropriation of water from impaired water bodies, and substantial treatment activities to make such water drinkable. If ever there were a proposal that warranted an EIS, this is it.

5. **Cascade has failed to evaluate alternatives.**

SEPA requires that agencies:

> (e) Study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources.

RCW 43.21.C.030(e). The Pollution Control Hearings Board has held that this provision creates a duty independent of any EIS requirement to conduct an alternatives analysis in those cases which involve "unresolved conflicts concerning alternative uses of available resources." *Marine Environmental Consortium v. Ecology*, PCHB No. 96-257, First Order on Summary Judgment, 1997 WL 394651, 7-9 (May 27, 1997). Washington State Department of Health regulations also specifically require that a water system plan contain a "[s]ource of supply analysis, which includes an evaluation of water supply alternatives if additional water rights will be pursued within twenty years." WAC 246-290-100(4)(d)(iv).

In this case, Cascade has utterly failed to evaluate water supply alternatives. Instead, its plan focuses exclusively on development of Lake Tapps for municipal water supply. Its supply and demand charts feature Lake Tapps prominently as the "solution" for Cascade's members. Cascade knows all too well that there are unresolved conflicts concerning alternative uses of the White River/Lake Tapps water. In fact, this has been the subject of substantial litigation before the Pollution Control Hearings Board. There is also no question that Cascade intends to "pursue" the Lake Tapps water rights "within twenty years." Accordingly, Cascade has violated both RCW 43.21C.030(e) and WAC 246-290-100(4)(d)(iv) by failing to consider alternatives.

CONCLUSION

For all of the reasons discussed above, Cascade should withdraw the current DNS and prepare an environmental impact statement which fairly evaluates the full proposal at issue and considers alternatives to the proposal. In preparing the EIS, Cascade should consult with all affected local governments and state authorities to ensure that the review is thorough and rigorous. Rather than finding out later, after millions more of their money is spent, that there are

problems with the proposal that Cascade did not consider, Washington's citizens are entitled to a realistic evaluation of the project now.

Sincerely,

Peter J. Eglick
Joshua A. Whited
Attorneys for City of Auburn

DJH/PJE/JAW:jk
Enclosure
Cc: Michael Ruark (via facsimile and electronic mail)
Daniel B. Heid, Auburn City Attorney

City of Auburn
25 W MAIN ST • AUBURN WA • 98001-4998
Telephone: 253.931.3000
FAX: 253.288.3132

March 17, 2003

Michael A Gagliardo, General Manager
Cascade Water Alliance
1309 - 114th Ave SE, Suite #300
Bellevue, WA 98004

SUBJECT: Cascade Water Alliance SEPA Mitigated Determination of Non-Significance (MDNS) for the Lake Tapps Storage Reservoir Water Rights Proposal.

Dear Mr. Gagliardo:

The City of Auburn ("City") is in receipt of the Cascade Water Alliance's (CWA) environmental checklist and Mitigated Determination of Non-Significance (MDNS) issued February 10, 2003 for the Lake Tapps Storage Reservoir Water Rights proposal. This letter responds to the opportunity for public comment consistent with the March 17, 2003 comment deadline.

In reviewing the environmental checklist and MDNS the City firmly believes that the documents fail to adequately evaluate environmental impacts resulting from the Lake Tapps Storage Reservoir Water Rights proposal and associated project(s).

Our comments focus on areas of concern related to probable significant adverse environmental impacts to the City of Auburn. These areas include:

- There is a need for a comprehensive review of all water supply alternatives;
- The impact of 100 CFS withdrawal from the White River on groundwater has not been adequately addressed;
- Cumulative impacts of the CWA Action Plan, Draft Regional Plan and the Water Rights application have not been adequately addressed;

- An analysis of water quality in the "By-Pass" reach of the White River prior to and after the action, in relation to listed endangered species, must be conducted; and,

- Impairment of Auburn's existing water rights and foreclosing Auburn's ability to secure water supply for its approved water planning area have not been addressed.

These concerns are discussed in more detail as follows:

Comprehensive Review of Water Supply Alternatives

The City of Auburn has always been supportive in principle of expanded place of use since it allows purveyors the ability to make beneficial use of the limited resources in the most cost effective manner. In this context, the proposed water right will transfer the burden of funding an expensive water treatment project to poorer jurisdictions by supplying the region with unnecessary higher water rates. The City of Auburn can withdraw groundwater from the underlying aquifer and wholesale it for as little as 75 cents per 100 ccf. This compares to a predicted cost that averages four to five times more than that of Auburn's current wholesale rate. Therefore, Auburn would request a cost estimate on what customers would expect to pay per ccf under the proposed action. We should be assured that there are no unfavorable impacts to local water supplies on which we rely to serve City water utility customers.

As a public policy note, Auburn, given the same water right as the CWA, could produce wholesale water at a price far less than the predicted cost to treat an equivalent amount of surface water from Lake Tapps. Therefore, in this particular case the decision to issue any water right to CWA should deduct, set aside and dedicate out of the proposed 100 CFS transfer the estimated future water requirements from all purveyors in the local area, as Auburn is in a much more economical position to provide such future supplies than is CWA and with fewer environmental impacts.

The environmental checklist and MDNS does not include the study and consideration of project alternatives as required under SEPA. At WAC 197-11-030(2), the SEPA rules require that agencies to the fullest extent possible identify, evaluate and implement reasonable alternatives that would mitigate adverse effects on the environment.

Impact of 100 CFS Withdrawal from the White River

The environmental checklist and MDNS clearly have not adequately addressed the environmental impact of withdrawing 100 cfs from the

White River system on the City's valley aquifer. The City of Auburn's 1999 Hydrogeologic Characteristic Report indicates that approximately 20 to 30 mgd of flow recharges the Production Aquifer ("Qvrd") via leakage from the White River. The study also indicates that Lake Tapps influences water flow from the White River to the Green River.

Given this hydraulic connectivity between surface waters and groundwater it is likely that implementation of the proposal will reduce contributions to the City's aquifers and surface water resources. No significant data has been provided in the environmental checklist to demonstrate that the proposed withdrawals will not affect Auburn's current water rights. Such a detailed study should be performed to quantify the total impact on the valley aquifer. Without such a study that documents the interdependence and hydraulic connectivity between the lake, the streams, and adjacent springs and valley aquifers, it is not possible to determine the future impacts on the stream and surrounding wetland environment or to draw any meaningful conclusions on how the agency might go about mitigating impacts that a reasonable assessment might expose. The study should be submitted to the Department of Ecology and the City for review prior to any decision concerning water rights.

Cumulative Impacts have not been Adequately Addressed

The CWA Action Plan, Draft Regional Plan and the Lake Tapps Storage Reservoir Water Right Proposal contemplate large regional facilities and water transfers across basins and water sheds. These actions must be analyzed comprehensively so that cumulative impacts are identified.

At a minimum, an environmental impact statement should be prepared, which considers other water supply options for CWA, including the Seattle Public Utilities contract options, the "North Bend" water right option, and the "Weyerhaeuser" water right option. Impacts concerning a large water treatment facilities and large pipelines crossing rivers, streams, and other sensitive areas should also be considered as part of this EIS.

The current approach of conducting separate environmental review for the component parts of the project is contrary to state law. The current piecemeal approach avoids consideration of cumulative impacts that is expressly prohibited. The SEPA rules at WAC 197-11-060(3)(b) require that proposals or parts of proposals that are related to each other closely enough to be, in effect, a single course of action must be evaluated in the same environmental document. It also specifies that phasing of environmental review is not appropriate when the interdependent parts of a larger proposal depend on the proposal as their justification or implementation.

Water Quality analysis in the "By-Pass" Reach

On pages 20, 25, and 27 of the Environmental Checklist, the White River "By-Pass reach is treated as an existing condition not needing consideration. This notion conflicts with the intent of the Clean Waters Act towards improving surface water quality. In 1998, Ecology included Instream Flow, pH and Temperature as part of their Water Quality limited list for this stretch of the White River. With all that the White River adds to the quality of life here in Auburn, how can it be regarded as an existing condition and exempt from further scrutiny? As a local jurisdiction trying its best to meet the demands placed on it under other facets of the Clean Waters Act (NPDES II), how does CWA avoid doing nothing to improve water quality? Not considering the environmental impacts or methods of improvement relevant to these water right actions is unacceptable and environmentally irresponsible. Additionally, with the Endangered Species Act (ESA) listing of Puget Sound Chinook and Bull Trout as threatened species, a water quality analysis that evaluates the potential for "Take" of these species needs to be considered.

More study is needed to help Auburn feel comfortable with the impacts on water quality. How does CWA plan to address these concerns?

Impairment of Auburn's Existing Water Rights and Foreclosing Auburn's Ability to Secure Water Supply for its Approved Water Planning Area.

Auburn has expended considerable funds analyzing the hydrogeologic character of the area surrounding the Lake Tapps Project. CWA's water right proposal has not given enough consideration to the potential impacts to Auburn's existing senior rights, Auburn's ability to have water supply for its approved service area or the resultant impacts of transferring up to 100 cfs per day out of the region.

In the context of GMA, all cities are obligated to plan for future water supply and rights necessary to meet future growth within their respective urban growth boundaries. All cities within the above mentioned river basins and others who otherwise may also be impacted share this common obligation to their citizens at large. No consideration is given in the checklist to Auburn's or other jurisdictions' existing or future water rights and needs.

A block of water for local regional growth within the two potentially affected basins should be provided from CWA's water right development at or below the lowest wholesale rate in the region if it is used for domestic supply. This block of water could also be used to provide the mitigation

flows for cities and mitigation or augmenting flows (leave the flow in the River) to justify future water rights at no cost to local purveyors. Potentially affected jurisdictions should be granted "first rights of refusal" for the estimated blocks of water that current approved Water Comprehensive Plans show a city needs to satisfy genuine GMA purposes for local growth.

CONCLUSION

In summary, the City of Auburn concludes that the CWA's issuance of an MDNS is seriously in error. The MDNS is based on an environmental checklist that does not consider all the information that would be necessary to identify the probable, significant adverse environmental impacts. Consequently, CWA is in no position to identify potential mitigation of all probable significant adverse environmental impacts to the two affected river basins should such a transfer of water outside of the White River Basin be approved.

Thank you for the opportunity to comment on the MDNS. The City of Auburn believes that in the absence of addressing the above referenced items that the MDNS is inadequate. Only through a detailed environmental impact statement can such an analysis be achieved.

Sincerely,

Paul Krauss, AICP
Director, Planning and Community Development Department

PK:ceb

CC: Pete Lewis, Mayor of Auburn
Dennis Dowdy, Director of Public Works
Duane Huskey, Assistant City Engineer/Utilities

Response to Comments from Eglick Kiker Whited PLLC

Comment Number	Response
1	Thank you for your comments regarding the proposed Tacoma-Cascade Pipeline (TCP). Upon review, it appears that your comments relate to the potential development of Lake Tapps Reservoir as a municipal water supply. Your comments do not apply to Cascade's issuance of the Draft EIS for the TCP. The Draft EIS states that the "TCP is not dependent upon construction of any other pipeline or acquisition of any other water resource to accomplish its intended purpose." The purpose of the TCP is to convey the water purchased from Tacoma Water to Cascade's members. SEPA review of the TCP has been appropriately focused on the environmental impacts of the TCP, as it is a water transmission line independent from the potential development of the Lake Tapps Reservoir.
2	See Response No. 1.
3	See Response No. 1. The TCP is designed to carry water from Tacoma Water's Second Supply Pipeline to Cascade's members. The pipeline is sized for the projected maximum supply available from Tacoma Water that could be used by Cascade. The TCP alternative routes have been designed to enable the construction of a water transmission pipeline to convey water that has been purchased from Tacoma Water. The TCP has independent utility, and is not interconnected to the future development of Lake Tapps Reservoir as a municipal water supply.
4	See Response Nos. 1 and 2.

http://www.issaquahaction.org

ISSAQUAH ENVIRONMENTAL COUNCIL

PO Box 921 • ISSAQUAH, WA 98027

February 1, 2007

Michael A. Gagliardo, General Manager
Cascade Water Alliance
Bellefield Office Park, Careage Building
1400 112th Avenue SE, Suite 220
Bellevue, WA 98004

Dear Mr. Gagliardo,

The Issaquah Environmental Council is a non-profit organization working to protect natural areas in Issaquah. We respectfully submit these comments on the Draft Environmental Impact Statement for the Tacoma-Cascade pipeline for which Cascade Water Alliance is the lead agency.

Our comments relate most closely to our concerns for the Issaquah Basin but we feel that the lack of detail in the area that we know best is also indicative of the lack of detail in other areas.

Please consider these comments with the intent of SEPA in mind. SEPA is a tool to understand how to create a better project with fewer unknowns and less net impact.

Thank you for your consideration,

Connie Marsh, commenting for the
Issaquah Environmental Council
P.O. Box 921
Issaquah, WA 98027
(425)392-4908

Please consider these comments on the Cascade Water Alliance Draft Environmental Impact Statement for the Tacoma-Cascade Pipeline.

1. On the broadest level this DEIS does not provide sufficient detail to allow a reasonable decision between the three proposed alignments. The EIS reads more like something halfway between a programmatic EIS and a project EIS. Clearly much more substantial, detailed information is necessary to understand what has and will been done to avoid, minimize and mitigate impacts of this project. 1
2. In the current format, it is not possible to compare the relative impacts of the different alignments. Please provide a chart in each chapter that compares the impacts of each alignment, the proposed mitigation for each alignment and the expected unmitigable impacts for each alignment. 2
3. Please provide a complete summary chart showing the comparative impacts for each alignment, and the proposed mitigation so that reasonable comparisons can be made. 3
4. Please provide all unmitigable impacts in this chart. (Example, impacts from blow off, and building ancillary chlorination facilities.) 4
5. There is no summary information indicating why the red alignment is the preferred alternative. This is especially confusing as the minimal environmental information presented clearly shows fewer impacts to the green alignment. 5
6. The mitigation language is non-specific and could be easily skirted. Please use tighter mitigation or best management practices language. For example language in text box below (Figure 1). 6

The specific environmental impacts and proposed mitigations are not stated clearly or in enough detail to create an accurate description of construction. 7

Soils:

A. It is clear that the red alignment has substantially more pipe within a seismic hazard area. It is unclear from the information provided what preventive efforts are effective in a seismic hazard area, how well these mitigations work. Please clearly show how placing this pipe in more seismic hazard area is not an unmitigable impact. 8
B. The red alignment will travel through significantly more erosion hazard area than the green alignment. There is not enough detail in the exact placement of the pipe to understand what these impacts will be. (The DEIS mainly assumes Best Management Practices and a sedimentation and erosion plan will mitigate any impacts.) The DEIS does not clearly indicate that avoidance of an impact is the first priority and does not clearly state how erosion hazard impacts will be avoided. There is not enough information to understand where within a wide right of way the pipe will be placed nor whether it will be going under or over culverts. (The DEIS mainly assumes Best Management Practices and a sedimentation and erosion plan will mitigate any impacts.) 9
C. The red alignment will travel through significantly more coal mine hazard area than the green alignment. These hazards have not been studied and the DEIS indicates that they will be studied during design with impacts considered at that point and mitigation implemented. SEPA mandates the study of probable impacts and their proposed 10

mitigations during the EIS phase. If the impact is not studied then the worst probable impacts must be included with the corresponding plan for mitigation.

D. Existing infrastructure: Clearly the vibrations from construction are expected to have some sort of negative impacts on some structures. I cannot understand how one alignment would have different impacts than another without understanding what possible existing infrastructure per alignment will be impacted. Will this vibration also have impacts on the natural environment. For example if you bore under the Cedar River would this impact fish? What are the expected unmitigable impacts? The DEIS says that this needed be done where it is not practical. Does this mean that someone's personal property could be damaged by vibration during the pipeline buildout but that does not have to be mitigated if it costs too much or is in someway difficult? Please clarify what practical means. 11

E. The conclusion that the earth impacts are less for the red line than the green line totally ignores seismic, erosion and coalmine hazard area impacts and existing infrastructure that could be damaged. Please make a complete and thorough comparison of all soils components. 12

3. Water: Water is the most problematic of all of the components of this DEIS.
   A. There is little accurate baseline information for existing conditions. 13
   B. There is little information on quantities of water, and quality of water that will be "blown off" into the varying basins. Without accurate information on which alignment has the ability to use sanitary sewer to accommodate blow-off no conclusions can be drawn on the potential impacts of this project. The methods to dechlorinate the water required by Ecology is not discussed. Will this require more building or clearing? 14
   C. This project should not be constructed in any critical area or critical area buffer, nor should outfalls be allowed into those areas during the wet weather season. Heavy rains can quickly overwhelm manmade structures during the rainy season. The impacts from this can be enormous to water quality. 15
   D. The red alignment has many more stream/water crossings than the green alignment all with minimal information on the construction of the crossing and its mitigation. The DEIS say over/under for example. Without a better understanding of the impacts to each crossing it is impossible to compare the impacts from the alignments. There are many studies of the creeks and drainage in the Issaquah Valley that will help provide detailed information on these streams. 16
   E. The DEIS indicates that Tibbetts Creek has been taken off of the 303 fecal coliform list; this is not correct. 17
   F. Exempt wells are not noted or marked in this DEIS. Please note and discuss impacts and potential mitigations to these individual wells. 18
   G. Flooding: Please describe how much of each alignment is impacted by flooding and how much of this floodplain will be displaced by a water pipe. Please describe how this displaced area will be mitigated. Please also discuss the potential for "blowing off" the water pipe during wet conditions and what operational management plans will be required for the wet season to prevent excessive water releases. 19

4. Animals:
   A. In order to protect the salmonid populations no work in critical areas or their buffers can be done during the wet weather window. No outfalls from non-critical areas can be allowed into critical areas during the wet weather window. 20

B. Long term water quality and quantity monitoring should be required in perpetuity to supplement the significant water monitoring in place. The monitoring should place an emphasis on chlorine, increased water quantities and turbidity to best control impacts from the water line long term. 21
C. Tibbetts Creek is slated to have a man made fish barrier removed this year. Please discuss Tibbetts in the terms of its likely Chinook population. 22

5. Traffic: It is very difficult to see any traffic impact comparisons. While the volumes on the red alignment are lower, the roads also tend to be 2 lanes instead of 4 lanes. Please provide a comparison of these impacts using "delay" or some other format that displays the impacts in a comparative manner. 23

6. Utilities: Sewer plays a major role in water management in this DEIS yet no impacts to sewer are addressed. Septic seems unaddressed. 24
   A. Please address the capacity of sewers in which Cascade is planning to put "blow off" water and any impacts that may occur. 25
   B. Please address the accessibility of sewers to the pipeline. 26
   C. Please specify the areas of no sewer accessibility for each alignment. 27
   D. Please show homes on septic. 28
   E. Please identify the impacts to the surface water system for the areas in which there is no sewer in which to place "blow off water" including septic systems. Please describe the proposed mitigation for each of these areas along with any secondary impacts that may occur. 29
   F. There is little discussion of placement of other utilities in the alignments nor where Cascade might impact these placements. Please discuss where on each alignment there is room available for the pipeline and where there is not. 30
   G. Please discuss whether Cascade will be responsible for moving other utilities in any of the alignments. 31

There has been a large quantity of information gathered for that corridor in the past 10 years by the City and especially the Talus development. As we speak newer information on stream quality is being compiled by the RCO off ice in the City of Issaquah. The State has considerable information on the placement of utilities within SR 900. Please include this easily available detail in your DEIS. 32

We have heard that Cascade is interested in "hurrying" this process as there is a looming water shortage. If this is the case please address that impact clearly and create an argument for a quick EIS turnaround. We have also heard that there are some barriers for permitting through Newcastle. Please explain these barriers as a part of the DEIS. 33

In conclusion, this DEIS in inadequate in too many areas. Another DEIS with more detail in nearly all areas should be created before taking this to a final. Please consider adding a cost benefit analysis so that dollar costs can also be addressed for this utility. I disagree strongly with the removal of a public hearing for the DEIS. 34

Construction-Related Mitigation Suggested Language

To mitigate the potential impacts of construction activities, a SWPPP would be prepared as a part of the site development design for each phase. A SWPPP describes in detail the erosion, sedimentation and other pollution control measures that would be used during construction. The details covered in the SWPPP include maintenance, inspection, targeted performance, location and monitoring of both construction-related BMPs and permanent stormwater treatment facilities.

The SWPPP would be prepared to comply with the anticipated requirements of the permits needed for the project. The SWPPP would comply with the newest Ecology manual and include the following

- ***Project overview, including earthwork activities and construction schedule.***
- ***Site conditions (soils, drainage, topography, critical areas).***
- ***Techniques and requirements to stabilize the site during construction and to accomplish final site stabilization.***
- ***Stormwater management provisions to isolate the project from off-site drainage, retain and detain stormwater that falls within the area disturbed by construction, and provide water quality treatment before releasing the water to natural drainage systems. The project needs to be designed to minimize localized erosion and to allow fish passage in streams that support fish use.***
- ***Water quality protection requirements include limiting clearing and grading activities to the dry season (April 1 to September 30 (or October 1); using temporary sedimentation ponds, silt curtains, sediment traps, interceptor ditches, straw coverage of bare soils, and rock check dams. Other elements to be addressed in the SWPPP are limiting exposure of soils, hydroseeding, maintaining protective buffer strips, and providing for land stabilization. An inspection monitoring and remedial action plan coordinated by an appropriately trained, full time construction inspector would be required. Refueling and storage of construction chemicals would take place in a controlled, protected area. The SWPPP would include a spill control plan that would specify measures to take in the event of a spill and would require training for site personnel.***
- ***Water quality monitoring during and following construction would be conducted to ensure that erosion control facilities are working and water quality requirements are being met. Monitoring would first focus on construction monitoring then operational monitoring focusing on any potential base flow loses pipeline creation and also impacts from blow offs or leaks in the pipeline***

Figure 1.

From: Connie Marsh [mailto:auntgrumpy@comcast.net]
Sent: Thursday, February 01, 2007 6:29 PM
To: dfields@cascadewater.org
Subject: Further comments on the DEIS

Please add these further comments to the comments that I have already submitted.

Capacity of Pipeline: There is little discussion of the capacity of this pipeline. Please discuss how long this pipeline will fill expected demand. Please discuss the plans for future capacity. Please make a clear argument as to why the 42" pipe is the appropriate capacity to put into place as compared to installing more or less capacity. 35

Cummulative Impacts: There is no discussion of the impacts of this entire pipeline, nor is there a discussion of development that is reliant upon the water from this pipe. Please include a clear comparison of development that would be allowed because of the added water capacity of this pipe. Any development that is reliant on regional water above the amount that Seattle could provide should be included, as the water line would not be built if there was no new development and the homes would not be built if there was no water. 36

Connie Marsh, representing
Issaquah Environmental Council
P.O. Box 921
Issaquah, WA 98027

Response to Comments from the Issaquah Environmental Council

Comment Number	Response
1	Thank you for your comments regarding the proposed Tacoma–Cascade Pipeline (TCP). The Draft EIS for the TCP analyzes the direct, indirect, and cumulative impacts associated with the proposed alternatives. Cascade believes that the environmental impacts and proposed mitigation measures are adequately stated in the Draft EIS and that the level of detail provided is typical for this stage of project design. Additional information, however, has since been developed and has been added to the text of the Final EIS. More specific design details and mitigation measures would be developed during the permitting phase of the project. WAC 197-11-404(4) states: "Description of the existing environment and the nature of environmental impacts shall be limited to the affected environment and shall be no longer than is necessary to understand the environmental consequences of the alternatives, including the proposal." Cascade believes that the Draft EIS is consistent with this requirement.
2	Table 1-1 of the Draft EIS lists potential impacts and mitigation measures by environmental element for the Preferred and Green Route Alternatives. Table 1-2 of the Draft EIS lists significant unavoidable adverse impacts by environmental element for the Preferred and Green Route Alternatives.
3	Table 1-1 of the Draft EIS lists potential impacts and mitigation measures by environmental element for the Preferred and Green Route Alternatives.
4	Table 1-2 of the Draft EIS lists significant unavoidable adverse impacts by environmental element for the Preferred and Green Route Alternatives. Operating the blowoff valves and building the rechlorination facility are not considered impacts that could not be mitigated. Please refer to Table 1-1 of the Draft EIS.
5	See Response No. 2.
6	Developing, implementing, and maintaining an Erosion and Sedimentation Control (ESC) Plan, a Stormwater Pollution Prevention Plan (SWPPP), and a Spill Prevention Control and Countermeasures (SPCC) Plan in accordance with regulatory requirements is listed for Water in Table 1-1. Contents of the SWPPP would typically include the items you have provided in Figure 1, although limiting clearing and grading activities to the dry season (April 1 to September 30) seems overly restrictive. Generally, the development of these plans occurs during the permitting phase of a project when more detailed design information is available. The plans would be reviewed and approved by the various agencies before construction was allowed to begin.
7	See Response No. 1.
8	The TCP would be constructed of welded steel pipe, which has withstood seismic events without rupturing in many cases. Although there are more identified seismic hazard areas along the red alignment (Preferred Alternative), both action alternatives are located in a seismically active area.
9	Comment noted. Table 5-12 of the Final EIS has been updated with information on culvert crossings along the Preferred Alternative.
10	Comment noted. Cascade is aware of the coal mine hazards (see Chapter 3, Earth), and these hazards would be considered during the design phase.

Comment Number	Response
11	Comment noted. Potential vibration impacts are discussed in Chapter 3 of the Draft EIS. Addressing your specific example of boring under the Cedar River, Cascade anticipates that these activities would be controlled by fish and wildlife agencies through requirements developed during the permitting process.
12	Comment noted. Comparison was made and discussed in Chapter 3 of the Draft EIS.
13	Comment noted. Cascade believes that the Draft EIS provides sufficient baseline information on existing conditions in Chapter 5, Water. See Response No. 1.
14	Although "blowoff" is the commonly used term for these facilities, they are actually drains that allow the pipeline to be dewatered, if necessary. This dewatering usually involves only a section of the pipe and can be controlled so that the outflow matches the capacity of sewers or storm drains in the area. Dechlorination of the drained water would be done using best management practices. These practices do not require permanent facilities beyond those associated with the drains.
15	Comment noted.
16	Specific design information and mitigation plans for each stream crossing for each alternative have not been developed at this time. The use of "over/under" to describe the location of the proposed pipe with regard to culvert crossings was used where more detailed information from engineering studies has not been developed. This information would not be developed until an alternative was formally selected. Culvert crossings and trenchless construction methods have been included in the preliminary level of project design, where feasible, with the intention of minimizing and avoiding impacts to streams. Specific impacts and mitigation for each stream crossing would be assessed in detail during the permitting phase of the project.
17	Tibbetts Creek was on the 1998 303(d) list of impaired water bodies published by the Washington State Department of Ecology for fecal coliform. However, the most recently approved 303(d) list (2004) indicates that Tibbetts Creek is water quality limited for temperature and dissolved oxygen.
18	Long-term and short-term impacts to exempt wells are not anticipated to result from the project and, therefore, are not identified in the Draft EIS. If unidentified shallow wells were encountered during construction of the project, potential impacts to these wells would be avoided or minimized by implementing the following mitigation measures listed in Section 5.3.2 of the Draft EIS: • Developing, implementing, and maintaining a Stormwater Pollution Prevention Plan (SWPPP) to minimize erosion and sediments from rainfall runoff at construction sites, and to reduce, eliminate, and prevent the pollution of stormwater. • Developing, implementing, and maintaining a Spill Prevention Control and Countermeasures (SPCC) Plan to manage toxic materials associated with construction activities (equipment leaks, disposal of oily wastes, cleanup of any spills, storing petroleum products/chemicals in contained areas away from streams, ponds, and wetlands). • Installing trench dams where necessary to prevent groundwater from flowing along the pipeline trench, altering groundwater hydrology. Trench dams would prevent the permeable pipe bedding and backfill from acting like a drain. • If the confining impermeable layer that underlies a wetland was disturbed during construction activities, the impermeable layer would be restored to ensure wetland integrity.

Comment Number	Response
19	After construction, the pipeline should not be affected by flooding. It would be underground and thus would not affect the floodplain. Scour depth and potential for channel migration would be considered on a case-by-case basis during preliminary design. The actual depth below maximum scour could be more than 10 feet depending on soil conditions and the trenchless method employed. See Response No. 14 regarding drains ("blowoffs").
20	Comment noted. Impacts to fish and wildlife presented in the Draft EIS are based on preliminary engineering and inventory-level fish and wildlife information. Thus, mitigation measures presented in the Draft EIS are based on preliminary impacts. Appropriate mitigation for project impacts would be determined during the permitting phase of the project.
21	Comment noted. Impacts to water quality and water quantity presented in the Draft EIS are based on preliminary engineering and inventory-level information. Appropriate water quality or water quantity monitoring requirements would be determined during the permitting phase of the project.
22	Comment noted. Cascade believes the level of detail provided on Chinook salmon populations in Tibbetts Creek is typical for this stage of project design. See also Response No. 1.
23	Comment noted. Summary sentences were added to Sections 8.1.1 and 8.1.2 of the Final EIS.
24	The TCP would have relatively little impact on sewers and no impact on septic systems; therefore, the Draft EIS does not address sewer systems as a major component.
25	See Response No. 14.
26	Accessibility to sewers is not applicable to the TCP.
27	See Response No. 26.
28	The TCP would not impact septic systems. Thus, the Draft EIS does not address septic systems.
29	See Response No. 14.
30	Utilities along the alignments were generally identified during the alternative route study phase. During final design, the exact locations of existing utilities would be determined and factored into the final design of the TCP.
31	If existing utilities must be moved to install the TCP, Cascade would be responsible for moving those utilities.
32	Comment noted. See Response No. 1. The Draft EIS and Final EIS prepared for the East Village (Talus) development and the Issaquah Creek Basin and Nonpoint Action Plan were reviewed. The information on water quality in Tibbetts Creek was incorporated into this Final EIS (see Section 6.1.1).
33	See Response No. 1.
34	See Response No. 1.

Comment Number	Response
35	The TCP is designed to carry water from Tacoma Water's Second Supply Pipeline to Cascade members. The pipeline is sized for the projected maximum supply available from Tacoma Water that could be used by Cascade. Constructing a smaller diameter pipe would not allow Cascade to make full use of the water available from Tacoma Water. Constructing a larger diameter pipeline would cost more but would not provide any additional supply, and thus would not be cost effective. Based on projected demands, Cascade has sources, including the TCP, to meet demands through the 20-year planning period discussed in its 2004 *Transmission and Supply Plan*. This plan was approved by the Department of Health in February 2007.
36	See Response No. 1.

PUBLIC WORKS
Larry Blanchard
Public Works Director
400 West Gowe
Kent, WA 98032
Fax: 253-856-6500

PHONE: 253-856-5500

January 24, 2007

Mr. Michael Gagliardo
Cascade Water Alliance
1400 112th Ave SE, #220
Bellevue, WA 98004

RE: Comments on Cascade Regional Water Supply System
Tacoma-Cascade Pipeline Draft Environmental Impact Statement

Dear Mr. Gagliardo:

Thank you for the opportunity to comment on the Draft Environmental Impact Statement for the proposed Tacoma-Cascade Pipeline. The City of Kent has reviewed the document and requests the following comments to be considered in the environmental analysis:

1) The City of Kent is in favor of the red alternative (preferred alternative), and opposes the green alternative. The green alternative would be constructed along 132nd Ave SE. The City of Kent has identified widening 132nd Ave. SE to five lanes in the CIP, currently scheduled for 2012. The City strongly discourages utility cuts in any roads. 1
2) There are several utilities located in the ROW of 132nd Ave SE. These utilities shall be avoided, or relocated at Cascade Water Alliance's cost if the green alternative is selected. 2
3) Page 1-1 identifies a turn-out from Kent to provide water to Kent in the event of an emergency. Though the City has expressed interest in a turnout, agreements are not in place to finalize the turnout. 3
4) Page 1-10 States that significant impacts along 132nd Ave SE, and presumably streets which cross it, would result if the green route is selected. The City strongly discourages selection of the green route to reduce impacts and disruptions inside the City. The red alternative has less traffic and would result in less traffic impacts. 4
5) Page 3-12 identifies crossing Meridian Valley Creek at 132nd Ave SE in the green alternative. The City of Kent recently completed a restoration project in the area and placed the stream in a bottomless box culvert. Impacts to the restoration project should be minimized. 5
6) Page 5-8 identifies Critical Aquifer Recharge Areas (CARAs) in the project area. The DEIS only includes CARAs identified by King County. Kent City Code 11.06.210 defines CARAs in Kent to include Wellhead Protection Areas (WHPA). There a WHPAs along 132nd Ave SE that should be identified and included in the environmental analysis. 6
7) Pages 5-35, 5-37. 5-40 and 5-38 make reference to the a Spill Prevention Control Plan. These plans should include notification to the local water purveyors, including the City of Kent, in the event of a spill. Staging areas and fueling areas for heavy machinery should be located outside all CARAs and WHPAs. 7

8) There are several inaccurate statements regarding the transportation facilities mentioned in table 8-1.

SE 272nd Street, also known as Kent Kangley Road and SR 516, in the immediate vicinity of the Preferred Alternative and the Green Route Alternative, is a principal arterial, and connects the Cities of Kent, Covington, and Maple Valley, with ADT in excess of 32,000 vpd. Further to the west, SE 272nd Street connects to the Cities of Auburn and Federal Way near the interchanges with SR 167 and I-5 respectively.

SE 240th Street, is a minor arterial that provides a connection between the Cities of Kent, Covington and Maple Valley, with ADT of 18,200 vpd at 132nd Ave SE.

8

148th Avenue SE is a collector arterial north of SE 256th Street

SE 208th Street, described as a collector arterial that links to SR 167, is classified as collector arterial east of 132nd Ave SE, but is a Principal Arterial west of SE 132nd Ave SE, in the direction of SR 167.

140th Avenue SE transitions via SE 204th Way to 132nd Avenue SE, and is classified as a principal arterial, but does not connect to the City of Covington. The route is adjacent to 2 elementary schools, and one high school.

9) The Pedestrian and Bicycle Circulation Section includes statements that may be misleading.

"Pedestrian circulation is partially provided for within the project area" implies that only sidewalks are suitable for pedestrian circulation. That is the preferred facility within urban settings, but walkable shoulders have been an acceptable standard in many rural areas within King County and are considered acceptable means of pedestrian circulation for safe walking routes to schools.

9

The statement "Most signalized intersections have crosswalks.", while accurate, is also misleading, or reflects a misunderstanding of crosswalks. Crosswalks exist at all intersections, unless pedestrian crossing is specifically prohibited by signs. I suspect the author meant to say "Crosswalks are marked at most signalized intersections" or something similar.

10) There are several deficiencies in the DEIS regarding the Green Route Alternative

The report asserts that LOS B, C, D, or E, is considered satisfactory under their respective jurisdictions or under unincorporated King County. The DEIS acknowledges that LOS standards vary by jurisdiction, but the document uses a more generalized LOS Standard, not consistent with the LOS Standards adopted by each jurisdiction. Appendix B of the DEIS includes a conclusion "In general, LOS Standards are applied only to traffic generated by the operation of a proposed project. Construction traffic effects are regulated through conditions placed on development permits and <u>through the SEPA process</u>" [emphasis added]. Since the DEIS does not disclose the impact, nor the applicable standard for establishing whether mitigation is required, the DEIS does not provide sufficient information to allow conditions to be determined, effectively negating "the SEPA process", as it might be applied to mitigating impacts from the construction of the project.

10

The DEIS fails to disclose the lack of viable detour routes with sufficient surplus capacity to absorb the traffic that would be detoured by the construction activities.

11

The DEIS fails to disclose the impacts to the schools adjacent to the Green Route alternative, and to the transport of students along 132nd Avenue SE. 12

The DEIS fails to disclose or mitigate the impacts to the transit system on the Green Route Alternative within the City of Kent, dismissing the impact as temporary inconvenience to commuters. 13

The DEIS fails to disclose the impacts of construction on access to several areas of low income housing and other residential neighborhoods and commercial properties along 132nd Avenue SE without alternative access. 14

Thank you again for the opportunity to comment on the Draft Environmental Impact Statement for the proposed Tacoma-Cascade Pipeline. Please feel free to contact me at (253) 856-5500 if there is any additional information I might be able top provide.

Sincerely,

Larry Blanchard

Larry Blanchard
Public Works Director

c: Mr. Tim LaPorte, P.E., City Engineer
Mr. Mike Mactutis, P.E., Environmental Engineering Manager
Mr. Kelly Peterson, Environmental Engineer
Mr. Steve Mullen, P.E., Transportation Engineering Manager
Mr. Brad Lake, Water Superintendent
Mr. Dave Brock, P.E., Utility Engineer
File

Response to Comments from the City of Kent Public Works Department

Comment Number	Response
1	Thank you for your comments regarding the proposed Tacoma-Cascade Pipeline. Comments noted.
2	Comment noted.
3	Comment noted. Discussions between Cascade and Kent are ongoing. Agreement would need to be reached sufficiently ahead of bid advertisement to include an emergency turnout in Kent.
4	Comments noted.
5	Comment noted.
6	Comment noted. Wellhead Protections Areas (WHPAs) in Kent have been included in the discussion of Critical Aquifer Recharge Areas (CARAs) in the Final EIS (see Section 5.1.1).
7	Comments noted. Suggestions to notify local water purveyors in the event of a spill and to limit staging and fueling areas to locations outside of CARAs and WHPAs would be considered for inclusion in the Spill Prevention Control and Countermeasures Plan.
8	Comment noted. These modifications have been made to Table 8-1 of the Final EIS.
9	Comment noted. These modifications have been made Section 8.1 of the Final EIS.
10	Comment noted. The Draft EIS identifies Level of Service (LOS) standards for specific roadways for the Preferred Alternative and the Green Route Alternative. General LOS standards have been added as Appendix B of the Final EIS.
11	Potential detour routes were identified in the Draft EIS and would be further discussed with the affected local jurisdictions during the permitting and construction phases of the project. Possible detour routes would be researched more and finalized during the design of the final traffic control plan.
12	Comment noted. These modifications have been made to Section 8.3.3 of the Final EIS.
13	Comment noted. These modifications have been made to Section 8.3.3 of the Final EIS.
14	Comment noted. These modifications have been made to Section 8.3.3 of the Final EIS.

From: Ramon Locsin - King County DDES, Site Development Services [mailto:ramon.locsin@metrokc.gov]
Sent: Tuesday, January 30, 2007 11:15 AM
To: dfields@cascadewater.org
Subject: Comments from CascadeWater.org

Web comments sent from:
http://www.cascadewater.org/pro_tacoma.html

Name:
Ramon Locsin - King County DDES, Site Development Services

Address:
900 Oakesdale Ave. SW
Renton
WA
98057-5212

Phone:
206 296-7151

Email:
ramon.locsin@metrokc.gov

Comments:
Stockpile and staging areas for construction of the waterline were not mentioned on the draft EIS. It is understood that this early in the process it is not thought of as of yet. However during review of the clearing/grading permit, these areas will need to be identified. If these areas will require clearing and/or grading and exceed certain thresholds, separate SEPA determination may be required. At a minimum, stockpile and staging areas should be included in the EIS with approximate locations with restoration proposals for these sites.

1

Response to Comments from the King County Department of Development and Environmental Services

Comment Number	Response
1	Thank you for your comments regarding the proposed Tacoma–Cascade Pipeline. The TCP would be located within private easements or within public rights-of-way. The private easements would generally be wide enough for stockpiling and staging the project adjacent to the trench. The construction plans would clearly show clearing and restoration requirements within the easements. For public rights-of-way, earthwork materials would be trucked in and out; there would be no stockpiling in the right-of-way. The contractor would be responsible for locating and obtaining permits for staging areas.

King County

Department of
Natural Resources and Parks
Director's Office
King Street Center
201 South Jackson Street, Suite 700
Seattle, WA 98104-3855

February 1, 2007

Michael A. Gagliardo, General Manager
Cascade Water Alliance
1400 - 112th Avenue SE, Suite 220
Bellevue, WA 98004

RE: Cascade Regional Water Supply System - Tacoma-Cascade Pipeline – Comments on December 21, 2006 Draft EIS

Dear Mr. Gagliardo:

Enclosed, please find comments from the King County Department of Natural Resources and Parks (DNRP) with regard to the Draft Environmental Impact Statement (DEIS) on the Tacoma-Cascade Pipeline.

Please note that other King County departments should be providing separate comments to you. In particular, you should ensure that you receive comments from the King County Department of Development and Environmental Services (DDES), which will be the major permitting agency for King County for this project. Also, please note, that the list of potential permits from King County that Cascade included in the Table on page FS-3 of the DEIS does not include all the permits identified by DDES in their scoping comments submitted to Cascade in March, 2006. Also, please note, that pursuant to the conditions of approval of the Cascade Transmission and Supply Plan by the King County Council in November, 2006, any County-issued permits to Cascade for work in County rights of way will be limited to facilities identified in that Plan. These include construction of the Tacoma-Cascade pipeline, but do not, at this time, include construction of facilities to link to other future sources of supply for Cascade and its members. 1

If you have any questions regarding the enclosed comments, please contact Dave Monthie at 206-296-3782 or via email at dave.monthie@metrokc.gov and he will direct you to the appropriate program or staff person for further information.

Sincerely,

Pam Bissonnette
Director

cc: Stephanie Warden, Director, Department of Development and Environmental Services
Paul Tanaka, County Administrative Office, Department of Executive Services

Stream and River Crossings

The proposed pipeline is expected to cross between 19 and 26 streams, depending on the alternative, including the mainstem Cedar River. Several crossing approaches are proposed, including trenchless construction, crossing over or under an existing culvert, and open trenching. We support utilizing the least impactful approach possible in all cases, which would likely rule out open trench construction. In addition, we recommend the use of existing bridge crossings and consideration of suspending the proposed pipe from the bridge where feasible. 2

Where trenchless construction is proposed, we support the general approach of placing the pipe at an elevation ten feet below the maximum scour depth. However, the lateral extent of the use of this technique appears to vary. We recommend the ten-foot-below-scour standard be applied across all areas over which the stream is likely to migrate over time. This would suggest using channel migration hazard mapping where it exists, and conducting geomorphic investigations to estimate possible channel migration where such mapping does not exist. Such an approach would require a longer crossing than ordinary high water; however the risk of long-term scour exposing the pipe would be greatly reduced. 3

Where open cut trench construction methodologies are proposed, the draft EIS makes no mention of the need to evaluate scour depths and ensure that the pipeline is placed at an appropriate elevation relative to maximum potential scour. The final EIS should clarify this approach and describe how potential scour of the pipeline will be avoided at these open trench crossings. The same level of confidence that scour will not occur is necessary for these crossings as for the trenchless crossings. 4

Where stream crossings have riparian wetlands associated with them, we recommend that the trenchless approach be used across the entire wetland boundary (e.g., May Creek and its associated wetlands). 5

<u>Cedar River Crossing</u>

Location

The general concerns described above are heightened for the Cedar River, where an existing public bridge may be feasible for the pipeline crossing; and if not, where channel migration is known to be possible in the future. Specifically, it is recommended that consideration be given to shifting the alignment of the pipeline to follow the location of the newly reconstructed Elliott Bridge, located several hundred feet upstream of the crossing described in the EIS. The advantages could include the ability to suspend the line along the bridge as well as avoiding impacts and possible damages in the vicinity of the flood-prone residential area downstream. If suspending the pipeline from the bridge is infeasible, this location would still be preferable as long-term channel location and scour are more predictable there given the extensive recent design process associated with the new bridge. Potential may exist to use the location of existing bridge abutments as reference points and established protected hard points for setting the lateral extent of trenchless construction. 6

Relationship to Cedar River Flooding Issues

King County is making special efforts to address flooding issues throughout the County. If the pipeline alignment cannot be moved to the new Elliot Bridge location, we recommend that additional detail and information be conveyed with respect to the crossing, in order to evaluate its effects relative to the significant and complex residential flooding problems that occur in its vicinity. This sub-reach of the river contains a relatively wide floodway and, according to preliminary study findings, moderate to severe channel migration hazard areas. In addition, there is a "training levee" on both banks providing only limited protection to the residences from river overtopping during modest flood events. However, the combination of high groundwater and seepage through the levee inundates the very properties intended to be protected by the levee at modest flood levels. Compounding this problem is the fact that major tributaries of Madsen Creek and Stewart Creek drain from the steep valley walls to the river across these properties. These streams regularly spill over their banks, flowing uncontrolled across access roads and the properties, and filling up the landscape (which includes the homes) located behind the levee. With no outlet, this water ponds and builds up, and must be pumped from behind the levees into the river, all the while causing damage to the homes and associated structures. King County is actively working to address this flooding problem. King County is also seeking to modify Madsen Creek and its High Flow Bypass Channel in order to reduce the destructive nature of flooding along its flow path. For both the Cedar River and Madsen Creek, resolution of the flooding issues can also achieve habitat improvements, possibly involving a setback or removal of the existing levees resulting in more dynamic river and floodplain processes. If the pipeline crossing remains at its current location, it should avoid constraining future projects to improve flood and habitat conditions along the Cedar River and Madsen Creek. Pipeline design and construction should take care to avoid relegating these channels to their existing bank alignments in perpetuity. 7

Cedar River Channel Migration and Potential Scour

If the pipeline cannot be relocated to allow an above-grade crossing (e.g., suspended from the new Elliot Bridge), then at a minimum, the crossing needs to be buried at a 10-foot depth beneath the lowest estimated scour depth of the Cedar River extending laterally not just to the ordinary high water mark, but to the full extent of the channel migration hazard zone (CMZ). If delineation of the CMZ is available during pipeline design, then that established CMZ mapping should be used. If unavailable, then the lateral span of the deep crossing should be based on a site-specific, reasonably conservative design approach that factors in the potential for long-term changes in river channel location. A reasonably conservative approach was used by the City of Tacoma on the Green River pipeline crossing at the Auburn Municipal Golf Course. In addition, this same deep crossing needs to be applied to Madsen Creek and the Madsen Creek High Flow Bypass Channel, so that planned and future improvements to that channel remain feasible. 8

Stream Riparian Areas

The draft EIS does not provide adequate detail related to impacts on stream riparian areas or appropriate mitigation. For example, it is unclear what type of vegetation would be cleared near salmonid streams, or how removing this vegetation would affect the waterbody. In addition, the proposed mitigation measure of replacing two trees for every tree cut down, will likely not adequately mitigate the immediate loss of forest cover, and could result in significant temporal impacts. For example, if ten trees averaging two-feet in diameter at 75-feet in height were cut down, replacing them with 20 seedlings would not adequately mitigate the immediate loss of this forest cover. The replacement ratio should be significantly increased, and further information should be provided regarding the size and age specifications of replacement trees. In addition, the prescribed mitigation should address impacts to the entire plant community, rather than just the canopy. Thus, the 9

replanting approach should utilize a diverse mix of species occurring or likely to occur in each specific stream's riparian area, rather than just a 2:1 approach of replacing trees.

Wetland Crossings

We have several comments regarding potential impacts and mitigation related to the proposed pipeline's many wetland crossings (68 to 80, depending on the alternative): 10

1. The wetlands in the draft EIS study area were not delineated. Moreover, some of the wetland information sources are very dated (the King County Wetland Inventory is a 1990 document for example). Field verification conducted from road rights-of-way and other areas open to public access does not significantly increase the confidence level of wetland presence, size, and category. All wetlands expected to be impacted by the proposed pipeline alignment should be delineated and the category in the draft EIS should be verified. Without delineation and final categorization, there is no way to accurately determine the extent of wetland impacts or to propose appropriate mitigation of those impacts according to wetland category. 11

2. The draft EIS was unclear related to the extent of regulated wetland buffer impacts and associated mitigation. 12

3. The draft EIS assumes that trenchless crossing methods would not adversely affect wetlands. However, installing a pipeline under wetlands using the trenchless method could affect drainage which can adversely and permanently affect wetland hydrology. More information on potential impacts associated with this method should be provided, particularly related to how hydrology affects the wetlands. In addition, the draft EIS does recognize the potential of soil failure during trenchless construction. The potential impacts of such failure should be analyzed and a contingency mitigation plan should be developed in the event that soil collapses under an existing wetland during construction. 13

4. The draft EIS states that 2.6 acres of wetlands will be crossed with an open trench (preferred alternative). Mitigating the trenching by backfilling excavated material and revegetating with native plants will likely not provide adequate mitigation of the potential long-term impacts this action would have on hydrology, soils, and the wetlands' native plant communities. On-site mitigation and/or restoration always have a risk of failure, and even successful mitigation of open trench construction will create temporal impacts associated with clearing mature vegetation and replanting with seedlings. To account for these impacts, including those cited in the report as unavoidable and significant (e.g., to plant communities), we recommend consideration of additional mitigation at appropriate ratios, as well as establishment of a comprehensive mitigation fund similar to that required by King County Ordinance 10776 (1993) which approved the Comprehensive Mitigation Plan Element of the 1987 Tacoma Comprehensive Water System Plan pertaining to the construction of Tacoma's Second Supply Pipeline ("Pipeline 5"). The ordinance included the following language: 14

   > Section II, 3. "Tacoma shall mitigate direct impacts of construction for disturbed portions of Class 1, 2 and 3 Wetlands as provided in Section III (Construction Mitigation Requirements). In addition to restoration, Tacoma shall replace or enhance altered Wetlands at a 2:1 ratio for Class 3 Wetlands according to the following formula: (Acres of Class 1 Wetlands + Acres of Class 2 Wetlands) * 2) + Acres of Class 3 Wetlands = Total Acres Replaced or Enhanced."

[these ratios would need to be specifically developed for this project in light of current local, state, and federal code requirements]

Section II. 4. "In addition to performing the construction mitigation outlined in Section III, and in consideration of the benefits to Tacoma provided by King County herein, and as compensation for the cumulative and recreational impacts of the Pipeline Project, Tacoma shall contribute $2.5 million to an Environmental Resource Fund to be administered by King County..."

5. In addition to needing local permits from King County DDES and the cities along the pipeline alignment, state and federal permits will be needed from the Washington Department of Ecology and the U.S. Corps of Engineers. The proponent should allow considerable time to obtain these permits. These agencies will likely require significantly more mitigation for wetland impacts than that being proposed by the proponent in their draft EIS. 15

Impacts of Pipeline Maintenance Corridor

The draft EIS states that a maintenance corridor will be maintained through periodic clearing along the alignment outside of stream/ riparian areas. While much of this corridor is associated with existing roadways, the report indicates that portions are through currently undeveloped, upland forested areas. The document also states that this maintenance corridor will be maintained through the wetland crossings as well. 16

Consideration should be given to avoiding the need for maintaining the maintenance corridor through wetlands and their buffers wherever feasible. For areas where avoiding the impacts associated with this maintenance corridor are unavoidable, the draft EIS should evaluate the potential impacts in terms of both the immediate area of the corridor itself being maintained without vegetation (including additional risk of invasive species migration from the corridor into adjacent wetlands and uplands), and of any potential for further fragmentation of wetland and terrestrial habitat. Appropriate mitigations should then be defined and described; these could include an annual commitment to offsetting the corridor impacts through offsite mitigation in the form of planting of native vegetation in established natural areas. WLR may be able to provide potential sites for this form of mitigation. 17

Air quality

King County is focusing much of its efforts with regard to climate change on reducing greenhouse gas emissions within the County. There are other actions that Cascade may be able to take during construction to further mitigate emissions, and not simply meet air quality standards. DNRP staff would be happy to discuss what some of those actions might be. 18

Parks

The list of affected King County Parks sites is complete. Please note that (a) any use of King County parks, natural lands, trails, ecological, or open spaces properties, or any impact to such lands, will require a Special Use Permit, subject to applicable terms and conditions as set forth in the permit; (b) any disruption resulting in a closure of a King County Regional Trail for more than 30 days will require a detour route and signage; and (c) any disruption limiting or closing access to any King County Parks facility will require signage in advance of the disruption. The document appears to cover the potential for impacts to the trails and trail use. It does not directly address mitigation for these impacts and or 19

restoration of any damage to the trail, and we would appreciate acknowledgment that King County should be able to obtain these if Cascade anticipates any alterations of the trail surface which would involve obtaining a permit from parks.

Potential for Dewatering of Private Wells

Dewatering associated with trench construction (e.g., top of p. 5-32 of the draft EIS) may impact nearby domestic wells by dewatering them during the construction period. The impacts of this should be discussed, along with appropriate mitigations. DNRP can assist with maps and data with regard to locations of such wells. The Department of Ecology should also be consulted for such information. 20

Potential Cumulative Impacts

Cumulative environmental impacts of the pipeline were cursorily discussed in the draft EIS. However, SEPA provides the lead agency the opportunity to consider the potential cumulative impacts of providing water to areas currently "off-line" and thereby facilitating additional land development in these areas. The impacts associated with facilitating future development, in excess of what the current potential for development is, should be discussed and mitigation options provided. Since the scope of the EIS is both construction and operation of the pipeline, these would presumably fall within the scope of future operation of the pipeline. 21

Construction near wastewater facilities

The King County Wastewater Treatment Division has many wastewater facilities located within or near the proposed pipeline alignment. In order to protect these wastewater facilities, King County is requesting that the Cascade Water Alliance do the following: 22

Submit construction drawings for the project to the Design, Construction and Asset Management Program, Civil/Architectural Section. Drawings should be submitted for review during design development so that King County staff can assess the project's impacts. Please send the drawings to:

Eric Davison, DCAM, Civil/Architectural Section
King County Wastewater Treatment Division
201 South Jackson Street, KSC-NR-0508
Seattle, WA 98104-3855
Tel.: (206) 684-1707

Response to Comments from the King County Department of Natural Resources and Parks

Comment Number	Response
1	Thank you for your comments regarding the proposed Tacoma–Cascade Pipeline (TCP). Comments noted. Comments were received from the King County Department of Development and Environmental Services (DDES). The permit list is constantly updated based on ongoing consultation with the regulatory/permitting agencies.
2	Comment noted. Most bridges have not been designed to support a pipe the size of the TCP (42-inch diameter) in addition to their existing loads. Commonly, the pipe must be installed between girders to maintain proper clearance from flood level, again a condition that most bridges would not be designed for. Placing a pipe on a bridge leaves the pipe more exposed to accidental or deliberate damage. It is also exposed to the elements, requiring more maintenance. Lastly, the bridge installation would likely create a high point requiring an air relief valve to be accessed through the bridge deck, which is undesirable to most designers. For these reasons, Cascade has not considered placing the TCP on bridges.
3	Comment noted. Scour depth and potential for channel migration would be considered on a case-by-case basis during preliminary design. The actual depth below maximum scour could be more than 10 feet depending on soil conditions and the trenchless method employed.
4	Comment noted. Scour depths would be considered during preliminary design. Backfilling of the open trench construction and streambed restoration would be specified to resist scour beyond the estimated maximum scour depth to protect the pipe as well as to avoid some undesirable hydrogeologic impacts to the streambed.
5	Comment noted.
6	Comment noted. See Response No. 2 regarding suspending pipe on bridges. In addition, moving the crossing to the location of the new bridge would require additional impacts during construction to the Cedar River Trail and 154th Place SE, which are avoided by the route shown in the Draft EIS (see Figures 2-2 and 2-3). Cascade would consider use of scour and stream migration data developed during the design of the new bridge.
7	Comment noted.
8	The locations of the jacking and receiving shafts for the Cedar River have not been determined at this time. Scour depths and possible migration would be considered during preliminary design of the crossing. The Tacoma Water Second Supply Pipeline crossing of the Green River extended from behind the levees on each side of the river. A shorter crossing was not feasible due to site conditions. Similar considerations for siting the Cedar River crossing would be included in the preliminary design. Madsen Creek would be crossed under the existing culvert on 149th Avenue SE.
9	Specific design information and mitigation plans for each stream crossing have not been developed at this time. Specific impacts and mitigation for each stream crossing of the selected alternative would be assessed in detail and suggested mitigation measures would be considered during the permitting phase of the project.

Comment Number	Response
10	Comment noted. Note that there are not 80 wetland crossings associated with the Preferred Alternative; instead, it is anticipated that 7 wetlands would be affected (see Section 7.2.2 and Table 7-6 of the Final EIS). This information has been updated since the Draft EIS was issued. Note also that there are not 68 wetland crossings associated with the Green Route Alternative; instead, it is anticipated that 4 wetlands would be affected (see Section 7.2.3 of the Final EIS). These numbers (80 and 68) represent the wetlands identified within the study areas of each action alternative (see Tables 7-4 and 7-5 of the Final EIS), but would not necessarily be directly impacted.
11	Wetland information for the Draft EIS is presented at the inventory level. This approach was selected as consistent with the preliminarily level of design used for the route alternatives selection process. Formal wetland delineation (including wetland ratings and determination of buffers) would be prepared as part of the permitting documents. These documents would include a detailed discussion of impacts to specific wetlands based on current design and the functions provided by specific wetlands. Mitigation appropriate to the project impacts would be determined at this time and included in the permitting documents.
12	Formal delineation of wetlands, rating of wetlands, and calculation of buffer widths would be provided as part of the permitting documents. A discussion of impacts to all critical areas and their buffers and proposed mitigation for both the critical areas and buffers would be determined at that point.
13	Comment noted. The potential for a trenchless crossing under a wetland to have an adverse impact on the drainage or hydrology of the wetland would be remote once construction was completed. Most trenchless crossings under wetlands are submerged within a trapped groundwater formation or a naturally sealed soil layer close to the surface. If the wetland is hydraulically connected through the soil, the casing can be sealed to prohibit groundwater loss through the pipeline bedding. Proper design would be employed to determine an alignment and method to avoid any long-term impact to the wetland. To minimize the impact of a potential collapse, the contractor would be required to have an approved contingency mitigation plan in place.
14	The impact estimates presented in the Draft EIS are based on preliminary engineering and inventory-level wetland information. Permit documents would include a detailed analysis of the impacts. Mitigation would be developed to compensate for losses to wetland and buffer functions. All mitigation would be consistent with local, state, and federal requirements and current guidance documents.
15	Comment noted.
16	Where the corridor was constructed using trenchless crossings, existing vegetation would not be cleared and maintained. In wetlands that were crossed using open trenches, the wetlands would be restored with wetland plants that would not affect the pipeline and that would not require additional, future clearing. In upland forested areas, a corridor would be maintained without trees or large shrubs with deep roots. Accessibility to pipeline appurtenances in wetlands, where required, would be provided by leaving a corridor wide enough to be accessed by vehicle or on foot.
17	Comment noted. See Response No. 16.
18	Comments noted. Cascade looks forward to working with the DNRP staff in this regard.
19	Comment noted. Cascade would coordinate directly with King County on mitigation requirements for temporary impacts to the trail system, where appropriate.

Comment Number	Response
20	Trench dewatering is typically above the withdrawal levels for domestic wells, and thus has no adverse impact on the capacity of the existing wells. The dewatering well would need to be close enough to the well to have influence and the soil porous enough to allow transmissivity. Domestic wells in the area of any dewatering activities would be identified during the final design and shown on the drawings if it appeared that there could be an impact based on location, soil, and groundwater conditions. The contractor would be required to design a system with appropriate protections so that construction would not impact nearby domestic wells.
21	Cascade believes that the discussion of cumulative impacts in the Draft EIS is more than "cursory" and is consistent with guidance provided by the SEPA Rules. WAC 197-11-402(2) indicates that: "The level of detail shall be commensurate with the importance of the impact, with less important material summarized, consolidated, or referenced." WAC 197-11-402(4) further states that: "Description of the existing environment and the nature of environmental impacts shall be limited to the affected environment and shall be no longer than is necessary to understand the environmental consequences of the alternatives, including the proposal." The TCP would be a water transmission pipeline that would allow drinking water to flow from Tacoma Water's Second Supply Pipeline (SSP) to the Bellevue-Issaquah Pipeline. The TCP would not distribute water to residential, commercial, and industrial customers. The environmental impacts of utilizing the water in the SSP have already been addressed in Tacoma Water's body of environmental documentation. Regulating growth and mitigating the impacts associated with that growth are the responsibility of local land use jurisdictions (including King County), not Cascade. Cascade is comprised of public water systems that are required to comply with Washington State law. State law (Chapter 43.20 RCW) specifically mandates that the delivery of water by public water systems for any new industrial, commercial, or residential uses be consistent with comprehensive land use plans and development regulations adopted by local jurisdictions including cities, towns, and counties.
22	Comment noted. King County's Wastewater Division would be contacted during final design so that it could provide input and review drawings.

From: Joe & Elizabeth Miles [mailto:joe.miles@integraonline.com]
Sent: Friday, February 02, 2007 10:18 PM
To: dfields@cascadewater.org
Subject: Comments from CascadeWater.org

Web comments sent from:
http://www.cascadewater.org/pro_tacoma.html

Name:
Joe & Elizabeth Miles

Address:
24639 156th Ave SE
Kent
WA
98042

Phone:
(253) 639-0123

Email:
joe.miles

Comments:
Joe & Elizabeth Miles
February 2, 2007
24639 156th Avenue SE
Kent, WA 98042

Mr. Michael A Gagliardo
Cascade Water Alliance,
1440 112th Ave. SE, Suite 220
Bellvue, WA 98004

RE: Central Segment Transmission Pipeline DEIS.

Dear Mr.Gagliardo,

As indicated by the address shown above, we and our family reside along 156th Avenue SE, along the route of the proposed transmission pipeline.. We offer the following comments regarding the proposal:

Rural versus Urban Zoning:

Our neighborhood is located within the Rural Area outside of the Urban Growth Area.

Our greatest concern is that our neighborhood zoning may change from Rural (RA-5) to Urban. Arguments to change the zoning of a neighborhood from rural to urban are frequently based upon the presence of urban utilities. We fear that the proposed water pipeline may facilitate this argument in the future. 1

The DEIS should address how each of the following King County Comprehensive Plan Policies is addressed: 2

Rural Public Facilities and Service Policy R-301;

R-301. King County shall work with cities and other agencies providing sevices to the Rural Area to adopt standards for facilites ans services in the Rural Area tha protect basic public health and safety and the environment, but are financially supportive at rural densities and do not encourage development. (emphasis added.)

Rural Public Facilities and Service Policy R-302;

R-302. Public spending priorities for facilities and services within the Rural Area should be as follows;

a. First, to maintain existing facilities and services that protect public health and safety; and

b. Second, to upgrade facilities and services when needed to correct levels of service deficiencies without unnecessarily creating additional capacity for new growth. (emphasis added.)

Rural Public Facilities and Service Policy R-303;

R-303. In the Rural Area, standards and plans for utility service should be consistent with long-term, low-density development and resource industries. Utility facilities that serve the Urban Growth Area but must be located in the Rural Area (for example, a pipeline from a municipal watershed) should be designed, and scaled to serve primarily the Urban Growth Area. .". (emphasis added)

Facilities and Services - Urban and Rural Services. F-207

F-207 In the Rural Area, services provided by agencies should support a rural level of development and not facilitate urbanization. (emphasis added)

Services and Facilities / Utility System Interties Policy F-236 & F-237;

"F-236. King County supports interties that allow the transfer of water resources among water utilities in urban area to the projected demands for growth. That transfer of water must be consistent with locally adopted growth management plans, regional water supp plans, groundwater plans, watershed plans, and approved Coordinated Water System Plans, and implement approved Endangered Species Act response requirements and Clean Water Act requirements." (emphasis added.)

"F-237. King County supports the development of appropriate regional water interties capital projects, subject to approval from appropriate local, state, and federal agencies and consistent with Policy F-236. ." .

We do not object to an existing home in the Rural Area utilizing the pipeline if their private well is failing or the installation of fire hydrants. However, to avoid the significant environmental impacts associated with providing urban services in the Rural Area, we recommend mitigation precluding access to the pipeline within the Rural Area to future urban development. 3

Water Quality Impacts

Learning the water within the proposed pipeline will be "treated" with chlorine, raises several potentially significant adverse impacts to the natural environment. We are not only concerned about the long term impacts associated with the standard concentrations of chlorine discharged from the pipeline during routine operation, we are also concerned about the impacts associated with the high concentrations of chemicals discharged from the pipeline during the initial post-construction sanitation process. Our concerns are not limited to chlorine, but to all water quality parameters including, but not limited to, changes in pH, and disinfection by-products (DBPs). The FEIS must address these impacts. A wetland of specific concern to our family is located along 156th Ave. SE between the Puget Sound Energy sub-station and the property address of 24807 156th Ave SE. It is our understanding the pipeline may have maintenance "blow-off" valves at various "sag" points typically located in these same areas of concern. The natural ecology at these locations may be significantly impacted by the discharge of treated water from the "blow-off" valve. The DEIS must address this potential impact. 4

Within the document entitled "Cascade Water Alliance - Summary of Mitigation Measures incorporated into the project design" page MIT-3 states:

"Discharge chlorinated water from blowoff value operation into the adjacent pipeline or local sanitary sewer or stormwater system, where available. If discharge to the surface drainage is unavoidable, the water will be dechlorinated prior to discharge to the environment." (emphasis added).

This mitigation is of concern because all the stormwater systems in the area drain to natural systems, typically a critical area such as a wetland or stream. 5

We recommend mitigation that the treated water not be allowed to discharge to these natural systems, but be pumped into tanks and transported to an appropriate sanitary sewer or treatment facility.

Groundwater Impacts:

Many of the local wetlands along the proposed routes, although segregated at the surface by the roadway prism, are probably hydrologically connected via groundwater under the roadway. The deep installation of the pipeline may block the groundwater connection, resulting in a significant environmental impact to these wetlands. Again, a wetland of specific concern to our family is located along 156th Ave. SE between the Puget Sound Energy sub-station and the property address of 24807 156th Ave SE. The FEIS should evaluate this potential impact. 6

Extension of the Soos Creek Trail:

Southerly Extension:

The Soos Creek Trail is a regional trail located in the vicinity of the proposed Central Segment Transmission Pipeline. Although the trail currently terminates near Lake Meridian, the King County Regional Trail Plan and the Covington Park Plan shows intent to extend the trail southerly. We recommend collaboration with the King County Park System and the Friends of Soos Creek Park to establish a multi-use pipeline and trail extension if the 156th route is selected. The FEIS should evaluate this consideration. 7

Easterly Extension:

If the 132nd Ave. SE alternative route is selected, we recommend the evaluation of an easterly trail extension from the Soos Creek Trail to the Lake Youngs trail, possibly via SE 208th St.. Again, we recommend collaboration with the King County Park System and the Friends of Soos Creek Park to establish a multi-use pipeline and trail extension in this area. 8

Amenities to the selected route:

Regardless as to route selected, we recommend the installation of fire hydrants where none exist to enhance fire protection to our neighborhood. 9

We thank you for the opportunity to comment on the proposed Central Segment Transmission Pipeline. Should you have any questions regarding our comments please call us at (253) 639-0123. We look forward to reviewing the FEIS.

Sincerely

Joe E. Miles, P.E.
Elizabeth Miles, RPh

Response to Comments from Joe and Elizabeth Miles

Comment Number	Response
1	Thank you for your comments regarding the proposed Tacoma–Cascade Pipeline. Appendix E of the Draft EIS addresses the applicable land use plans, policies, environmental, and utility elements that are applicable to the TCP. Although the Preferred Alternative would cross rural areas, Cascade would not directly serve any customers. The rural character of development or facilitation of development would not be changed by construction of the TCP. Land use development would be subject to the local government's development regulations and comprehensive planning.
2	See Response No. 1.
3	The TCP is a water transmission pipeline and would not directly serve any customers.
4	See Sections 5.2.2 and 5.3.2 of the Draft EIS for discussion of control measures to be implemented at discharge locations. Water discharged from the pipeline during the initial sanitation process and from blowoff valves would discharge directly to a sanitary sewer, where available, or would be treated to Washington State Department of Ecology standards prior to discharging to a storm sewer or natural water body. Flow control measures and water quality treatments implemented prior to discharging to a storm sewer or water body would minimize any impacts to critical areas.
5	Comment noted. The control measures listed in Section 5.2.2 of the Draft EIS are adequate to control chlorine levels and flow rates from discharge locations within the standards of all regulating agencies. Treated water discharged to a storm drain would meet water quality standards with the intention of minimizing and avoiding downstream impacts, including impacts to critical areas.
6	Control measures to protect against impacts to groundwater hydrology are discussed in Chapter 5 of the Draft EIS. As stated in Section 5.2.2 of the Draft EIS: "Typical pipeline bedding and backfill material within the roadway prism would be free-draining, granular materials, and would not be expected to alter groundwater hydrology during project operation. Trench dams would be selectively installed to prevent groundwater flow along the pipeline trench. Trench dams would prevent the permeable pipe bedding and backfill from acting like a drain, thus preventing alteration of groundwater flows during project operation. If the confining impermeable layer underlying an adjacent wetland was disturbed during pipeline installation, the impermeable layer would be restored to ensure long-term wetland integrity. With these control measures, operation of the Preferred Alternative would not affect groundwater hydrology." These measures would prevent the pipeline from blocking groundwater connections along the proposed alignments, and would thus minimize or avoid this potential impact.
7	During the routing study phase of the project, alternatives that followed existing trail systems were evaluated and, in most cases, eliminated from further consideration because of their potential environmental impacts.
8	See Response No. 7.
9	The TCP is a transmission pipeline designed to transport large quantities of water to purveyor distribution systems that are metered and monitored for water quality and quantity within the Cascade membership area. Each water purveyor is responsible for serving the customers of its area, and for providing domestic drinking water and fire protection. Cascade does not serve the areas in question, and is not obligated to do so. The pressure at which the water is delivered in the transmission pipeline is very high, in excess of the fire hydrant capacity. Therefore, any fire hydrant attached directly to a transmission line requires a meter and pressure reducing valve station. This would be very costly for single hydrant installation. For these reasons, fire hydrants are typically not installed on transmission lines.

MUCKLESHOOT INDIAN TRIBE
Fisheries Division
39015 - 172nd Avenue SE • Auburn, Washington 98092-9763
Phone: (253) 939-3311 • Fax: (253) 931-0752

February 2, 2007

Mr. Michael Gagliardo
General Manager
Cascade Water Alliance
1400 112th Ave SE, Suite 220
Bellevue WA 98004

RE: Tacoma-Cascade Pipeline Draft Environmental Impact Statement

Dear Mr. Gagliardo:

The Muckleshoot Indian Tribe Fisheries Division has reviewed the Draft Environmental Impact Statement (DEIS) for the proposed Tacoma-Cascade water pipeline. This project proposes to construct a 20 mile long, buried 42 inch diameter pipeline and ancillary features to convey drinking water from the Tacoma Water Second Supply Pipeline (SSP) to Cascade's existing Bellevue-Issaquah Pipeline.

A general concern is that the DEIS fails to evaluate the impacts of the overall water supply program and alternative sources of supply as we requested in our March 14, 2006 scoping comments. Similarly, the DEIS also fails to discuss and analyze the larger integrated water supply transmission system that Cascade has proposed as we also requested in the Tribe's scoping comments. 1

In addition to these general concerns, we are attaching our specific comments for your review and consideration.

We appreciate the opportunity to review this document. If you have any questions or would like to meet to discuss these comments, please contact me at 253 876-3116.

Sincerely,

Karen Walter
Watersheds and Land Use Team Leader

Specific Comments to the DEIS by Chapter and page number (where applicable)

Summary

Page 1-2- The potential location(s) of the proposed re-chlorination facility should be discussed in the FEIS as this facility and its operation may have adverse impacts on streams, wetlands, riparian areas, and water quality. 2

Also on this page, the discussion about the Purpose and Need for this project ignores the fact that this project is a subset of a larger integrated water supply and transmission system, and thus inappropriately segments environmental review of a larger proposal. The larger integrated water supply and transmission system includes a South pipeline segment and development of Lake Tapps as a new source of supply which will ultimately replace most of the water now under contract from Seattle and Tacoma. The ability to deliver Lake Tapps water to Cascade members north of the Green River is inextricably tied to the construction and operation of the Tacoma-Cascade pipeline. 3

Section 1.6 Unavoidable Impacts

The table in this section for both action alternatives fails to identify if there will be permanent loss of riparian area as the result of the proposed water pipeline transportation corridor. Similarly, the table also fails to disclose the potential for the corridor to become infested with noxious and invasive plant species creating the need to remove these plants by chemical means. 4

Chapter 5- Water

Page 5-3- Please note that the Washington State Water Quality Standards have changed. The State is no longer using the "class-based system"; rather it has switched to a "use-based system". See http://www.ecy.wa.gov/programs/wq/swqs/new-rule.html for more information. In addition to changing the manner by which surface waters are classified, the standards for some parameters have changed. The result is that the information in Table 5-1 may be incorrect and any conclusions or analysis in the DEIS based on information in Table 5-1 may also be incorrect. 5

Page 5-5- Washington's 303(d) list is based on available data and is not necessarily a comprehensive list of which streams meet state water quality standards and which surface waters do not. If a waterbody is not on the 303(d) list, it should not be assumed that the waterbody is meeting water quality standards; rather it may be due to a lack of data. Also, the Washington Department of Ecology is working on a "TMDL" process for areas in the Green-Duwamish River basin including the Soos Creek basin for temperature and dissolved oxygen. See http://www.ecy.wa.gov/biblio/0610061.html for more information. 6

Pages 5-11 through 5-12

See previous comments for page 5-5 regarding changes to Washington's water quality standards and limitations to the 303(d) list. 7

Page 5-13

Water quality data should be available from King County Roads' Division as part of their Elliott Bridge replacement project. 8

Pages 5-23 through 5-26, Table 5-12

As noted in this table, the majority of the 26 stream crossings within the preferred alternative would be crossed using either a trenchless crossing method or going above or below the existing culverts conveying these streams. The streams where an open trench method may be used include two of the three Tibbetts Creek sites (R20 and R26); Clay Pit Creek (a tributary to Tibbetts Creek); and West Fork Tibbetts Creek. We recommend that a trenchless method be used for these sites to avoid impacts to Tibbetts Creek and its tributaries. The Tribe is currently working with the Washington Department of Fish and Wildlife to conduct an adult salmon restoration project where adult salmon 9

from Issaquah Hatchery are relocated to Tibbetts Creek. These salmon, as well as, naturally returning adult salmon may be adversely affected by open trench methods and any resulting sedimentation or water quality impacts.

Also, for any crossing where the pipeline may go over or below an existing culvert, the location of the pipeline should be such that it does not reduce culvert repair options where an existing culvert may need to be replaced or restored to provide passage of fish, wood, water, and sediment. For example, if the pipeline were located above an existing culvert that needs to be replaced and a bridge is the preferred replacement option, the pipelines location may become an impediment to replacement of the culvert with a bridge because of pipeline concerns and/or relocation expense. Culverts that may be passable today may become impassable over the life of the pipeline. The project should anticipate that several culverts in the project area may need replacement now or into the future and locate the pipeline to avoid future conflicts. 10

Pages 5-26 through 5-29
The Green Route has fewer stream crossings and all of these crossings will be either trenchless or routing the pipe over or below existing culverts. As a result, this project alignment will likely have fewer impacts to the affected streams in the project area. 11

5.2.2 Preferred Alternative – Direct Impacts, Construction
Page 5-29
As noted in the DEIS, stormwater draining construction sites may introduce sediment into streams resulting in adverse impacts such as habitat degradation and decreased water quality. As we suggested in our scoping comments, mitigation measures that should be considered include screening contractors for a good performance record for erosion control work, and use of third party contractors to review the erosion control plan, to review the stormwater pollution and prevention plan, and to independently monitor stormwater and erosion control measures. 12

Other mitigation measures that should be implemented that were not discussed in the DEIS include weekly monitoring and monitoring after storm events. Automatic samplers to monitor turbidity and /or Total Suspended Solids (TSS) for the affected surface waters should be installed and maintained during construction periods when runoff could occur and enter these surface waters. 13

Page 5-30 (and page 5-32)
We support the mitigation measure of routing chlorinated water to a sanitary sewer system or dechlorinating water before discharging it to the affected surface water for both treatment of the pipe, and as a standard practice for any of the proposed 65 blowoff valves located on the pipe. It is essential that any water discharged to the storm system or natural drainages be dechlorinated to levels below that which would cause acute or chronic toxicity to aquatic organisms. 14

The launching and receiving pits for the trenchless stream and wetland crossings should be set back as far as possible to avoid impacting stream and wetland buffers, causing a loss of trees from these areas. The DEIS lacks details about where these pits would be located. 15

Preferred Alternative -Cumulative Impacts
Page 5-35- The water pipeline will result in the permanent loss of vegetation in the affected basins which will likely add to the loss of riparian and instream fish habitat as a result. 16

Green Route Alternative- Cumulative Impacts
Page 5-39- The water pipeline will result in the permanent loss of vegetation in the affected basins which will likely add to the loss of riparian and instream fish habitat as a result. Since the Green Route has fewer stream crossings, it 17

appears that this project may result in fewer cumulative impacts as the result of permanent vegetation loss.

5.3.2 Mitigation Measures- Preferred Alternative
Page 5-40
As noted in the DEIS, stormwater draining construction sites may introduce sediment into streams resulting in adverse impacts such as habitat degradation and decreased water quality. As we suggested in our scoping comments, mitigation measures that should be considered include screening contractors for a good performance record for erosion control work, and use of third party contractors to review the erosion control plan, to review the stormwater pollution and prevention plan, and to independently monitor stormwater and erosion control measures. 18

Other mitigation measures that should be implemented that were not discussed in the DEIS include weekly monitoring and monitoring after storm events. Automatic samplers to monitor turbidity and /or Total Suspended Solids (TSS) for the affected surface waters should be installed and maintained during construction periods when runoff could occur and enter these surface waters. 19

6.1.1. Preferred Alternative- Fish
Page 6-2- On this page, the DEIS indicates that wherever the water pipeline crosses an existing culvert, it will be located under the culvert. Table 5-12 and 5-13 indicate that the pipeline may be located above or below the culvert. Please clarify. See also page 6-11 where the crossing option may be above or below the culvert. 20

Table 6-1, pages 6-3 and 6-4
The fish presence information reported in this table may be incomplete as it does not appear that the authors consulted the Fish Distribution maps for WRIAs 8 and 9, which are available on King County's website. In addition, there is fish presence data that is available on King County's website under its Salmon Watchers Program. For example, adult sockeye have been documented in May Creek in 2001, 2002, and 2003 in the Salmon Watchers Program. In the absence of existing fish presence data and with no plans to collect fish presence data, the FEIS (and the project) should assume that all of the affected waterbodies are fish-bearing unless the stream gradient exceeds 20% or has natural passage barriers. The DEIS lacks stream gradient data for several streams, yet there are statements in the fish chapter that various affected streams are not fish-bearing. Additional data is needed for stream crossings at R4, R5, R6, R7, R14 and R 16; some of which are noted specifically in comments below. 21

Page 6-5
King County Roads Division should have data regarding fish use in Stewart Creek as part of monitoring they completed for the Elliott Bridge project. Also, the Cedar River provides migration, spawning, and rearing habitat at the pipeline crossing site. 22

Page 6-6
See previous comments regarding the Muckleshoot Indian Tribe Fisheries Division and WDFW project to restore salmon in Tibbetts Creek. 23

6.1.2. Green Route -Fish
Table 6-2, pages 6-7 and 6-8
The fish presence information reported in this table may be incomplete as it does not appear that the authors consulted the Fish Distribution maps for WRIAs 8 and 9, which are available on King County's website. In the absence of fish presence data, the project should assume that all of the affected waterbodies are fish-bearing unless the stream gradient exceeds 20% or has natural passage barriers. The DEIS lacks stream gradient data for several streams, yet determines that these streams are not fish-bearing. Additional data is needed for stream crossings at G3, G4, G7, G15, G16, G17 and G19. 24

Page 6-8
The stream conditions in the unnamed tributary to Soosette Creek appear to be similar to other urban streams (i.e. Mill Creek in Auburn) where we have found coho and cutthroat trout in channels full of reed canary grass. Additional stream data is needed to determine if this stream supports salmonids during some portion of their life cycle (i.e. winter rearing). The same can be said for the Meridian Valley Creek tributary (G7) discussed on page 6-9. 25

Page 6-10
The City of Bellevue may have more current information on salmonid use in Coal Creek collected in part during their Environmental Impact Statement for the Coal Creek Sedimentation Program (2006). 26

Page 6-11
The DEIS lacks a complete analysis about the maximum extent of vegetation that may be removed during construction and permanently removed in corridor maintenance activities within 200 feet of all affected streams. The vegetation discussion in Chapter 7 only identifies vegetation impacts from wetlands and upland areas. If the information is embedded within either the wetland or upland discussion, it should be separated out for the affected streams. In addition, the removal of all trees that are 6 inches in diameter or greater within 200 feet of any stream should be considered as an impact to future wood recruitment which can be mitigated in part by placing these trees into the affected stream channel. Planting new trees will not fully mitigate for this impact as there is a temporal loss of wood recruitment potential until the new trees are the same height and diameter as the trees they replace. 27

Pages 6-12 and 6-13
The discussion on this page of potential impacts to WDFW's Soos Creek Hatchery is a good start; however, it fails to note that the hatchery has already experienced fish losses. If the pipeline were to break during a flood event, then the effect at the hatchery could see further losses of fish by reducing the number of adults available for egg take or destroying any fry rearing in ponds at the facility or causing sediment to disrupt flow at the hatchery intake, which may also kill eggs and fry. At a minimum, the hatchery should be contacted if there is a pipeline breach in the Soos Creek basin. 28

Response to Comments from the Muckleshoot Indian Tribe

Comment Number	Response
1	Thank you for your comments regarding the proposed Tacoma–Cascade Pipeline (TCP). Your concerns that were noted in the March 14, 2006 scoping comments relate to the need to expand environmental analysis beyond the Central Segment; these concerns have been addressed in the Draft EIS for the TCP. The Draft EIS demonstrates that Cascade has expanded the environmental analysis associated with what was previously known as the Central Segment to include what was previously identified as the North Segment. The two segments have been combined as one project, the TCP, which is intended to bring water acquired from Tacoma Water to Cascade's members. The sizing and the routing of the TCP have been influenced by the location of the Tacoma Second Supply Pipeline and the location of the Bellevue-Issaquah Pipeline. The TCP is one component of the Cascade Regional Water Supply System, and has the ability to operate independently of any other planned components. The TCP is not dependent upon construction of any other pipeline or acquisition of any other water resource to accomplish its intended purpose.
2	Comment noted. Section 1.1 of the Draft EIS was revised to reflect additional information about the rechlorination facility.
3	See Response No. 1.
4	Permanent loss of riparian habitat cannot be accurately estimated due to the preliminary level of design available for the alternatives. Because each action alternative was designed to avoid riparian impacts by using trenchless construction methods and following existing paved rights-of-way, only minor impacts are anticipated. As such, the permanent loss of riparian habitat for each alternative would not constitute a "significant unavoidable adverse impact". Noxious weed infestation was not included in Table 1-2 of the Draft EIS because the alignment would be re-vegetated; the intention would be to minimize future infestation of the pipeline corridor with noxious or invasive plant species. Therefore, this would not be a "significant unavoidable adverse impact".
5	Comment noted. Chapter 5 of the Final EIS reflects the changes to Washington's water quality standards as of December 21, 2006. Table 5-1 was revised to include the Washington State Department of Ecology's new water quality criteria and standards.
6	Comment noted. Section 5.1.1 of the Draft EIS was updated to include the total maximum daily load (TMDL) for the Soos Creek basin.
7	Comment noted. Chapter 5 of the Draft EIS was modified to reflect changes to the water quality standards. Any additional references to the 2003 rule in the EIS (May Creek, Coal Creek, Tibbetts Creek, and Mercer Slough basins) were modified to the current state standards.
8	Comment noted. Water quality data was obtained from King County Department of Transportation for Stewart Creek, and the text in Section 6.1.1 was modified to reflect this.

Comment Number	Response
9	Comment noted. Cascade is coordinating with the Washington Department of Fish and Wildlife (WDFW) on the second crossing of Tibbetts Creek. If the stream were to be crossed using an open-cut trench, this coordination would continue to ensure that adequate stream and riparian habitat restoration would occur as mitigation. The open-cut crossing method proposed for Clay Pit Creek, West Fork Tibbetts Creek, and the northernmost Tibbetts Creek crossing would be coordinated with construction of the Washington State Department of Transportation's (WSDOT's) SR 900 - SE 78th Street to Issaquah Additional Lanes Project. WSDOT is planning to replace the culverts that convey these streams across SR 900. The pipeline would be installed during construction of the culvert replacements, thus consolidating and minimizing disturbance to these streams that could result from these two projects. The culvert replacements would result in long-term beneficial effects to fish passage and habitat accessibility. Cascade would advise and coordinate with the Muckleshoot Indian Tribe regarding the status of activities in this area.
10	Comments noted. The exact location of the pipeline with regard to existing culverts would be assessed during advanced phases of design. Consideration would be given to future culvert replacements during permitting of the project.
11	Comment noted. Table 1-1 of the Draft EIS includes a comparative summary of impacts associated with each of the action alternatives, including the potential impacts to streams.
12	Contractor qualifications and performance requirements for erosion and sedimentation control (ESC) measures would be included in contract specifications. ESC Plans, with Best Management Practices (BMPs) designed in accordance with code requirements, would be included in the contract documents that would be submitted for review and approval to all permitting/approval jurisdictions. The contractor's development, implementation, and maintenance of ESC measures would be inspected and monitored throughout the project. The use of an independent environmental monitor would be considered by Cascade.
13	Developing, implementing, and maintaining ESC measures would be a contractual obligation. ESC monitoring is usually a permit condition for most jurisdictions. Inspection and monitoring of the ESC measures would be performed to meet or exceed established requirements. Sampling of runoff discharged from sediment ponds and traps would be performed at or exceed required frequencies. The method of sampling would be considered by Cascade. Benefits of automatic sampling may not be cost effective.
14	Comment noted.
15	The exact location of launching and receiving shafts would be addressed during final design. In general, the shafts would be located sufficiently clear of the ordinary high water mark to prevent impacts to creeks. Disturbance within the buffers would be restored with appropriate wetland topsoils and plant species. Work within wetlands and buffers would occur only during construction periods allowed by permits.
16	Use of trenchless construction methods and culvert crossings would be incorporated into the project design, in part to reduce the permanent loss of riparian habitat. Vegetation clearing along streams where open-cut trenching is proposed would be minimized by reducing the width of the construction corridor, and would be mitigated by replanting streamside vegetation. This is mentioned with regard to cumulative impacts on fish in Section 6.2.2 of the Draft EIS. More exact quantities of riparian vegetation removal and possible additional mitigation measures would be determined during permitting of the project.
17	See Response No. 16.
18	See Response No. 12.
19	See Response No. 13.

Comment Number	Response
20	Comment noted. Section 6.1.1 of the Draft EIS was revised to indicate that where the pipeline would cross a culvert, the pipeline would be located above or below the culvert. The exact location of the pipeline with regard to existing culverts would be assessed during advanced phases of design.
21	Comment noted. WRIA 8 and WRIA 9 Fish Distribution maps and the Salmon Watchers Program Web site were reviewed and available information on fish species has been incorporated in Chapter 6, Animals. The suggested assumption that all water bodies are fish-bearing, unless the stream gradient is known to be greater than 20% or there are known natural passage barriers, was incorporated into Chapter 6 of the Final EIS.
22	Comment noted. Information provided on fish use in the Cedar River was incorporated into Chapter 6 of the Final EIS. Information provided by King County on fish use in Stewart Creek was incorporated into Section 6.1.1.
23	Comment noted. See Response No. 9.
24	See Response No. 21.
25	Comment noted. See Response No. 21.
26	Comment noted. The EIS prepared for the Coal Creek Sedimentation Program was reviewed and information on fisheries in Coal Creek was incorporated in Section 6.1.2 of the Final EIS.
27	Comment noted. Information on existing wetlands, uplands, and riparian vegetation is inventory-level information. The suggested analysis of trees and wood recruitment would be addressed during advanced phases of the project.
28	Comments noted. Section 6.1 of the Draft EIS discusses damage to the hatchery facility and resulting fish losses that have occurred during past storm events. The impacts discussion in Section 6.2.2 was modified to reflect the suggested changes.

From: Maiya I Andrews, City of Newcastle [mailto:maiyaa@ci.newcastle.wa.us]
Sent: Wednesday, January 31, 2007 12:38 PM
To: dfields@cascadewater.org
Subject: Comments from CascadeWater.org

Web comments sent from:
http://www.cascadewater.org/pro_tacoma.html

Name:
Maiya I Andrews, City of Newcastle

Address:
13020 Newcastle Way
Newcastle
WA
98059

Phone:
425/649-4444

Email:
maiyaa@ci.newcastle.wa.us

Comments:
1.An approximately 1.6 mile long section of the "Green Route" alternative is located in the Coal Creek Parkway right-of-way within the City of Newcastle.
Newcastle City Council denied support of this alternative following a presentation by Cascade Water Alliance on April 4, 2006. The portion of the "Green Route" alternative within the City of Newcastle should be eliminated from consideration because of the lack of available public easement within the City of Newcastle. 1

2.Construction of the portion of the "Green Route" alternative in the Coal Creek Parkway right-of-way within the City of Newcastle will cause a significant unavoidable adverse impact to transportation (Table 1.2, page 1-10). The proposal to close Coal Creek Parkway to through traffic and detour traffic along Sunset Boulevard SE to SR-405 to SE 69th Way will severely impact at least 22,700 trips per day (Table 8.3). The number of impacted trips may be significantly greater should closure of Coal Creek Parkway coincide with planned construction improvements within the SR-405 corridor. In addition, closure of this major north-south throughway will severely impact local business, residents, and emergency response. 2

3.Parkway right-of-way within the City of Newcastle will result in significant geotechnical impacts (Section 3.23, pages 3-13 and 3-14). The presence of shallow bedrock, creek and culvert crossings, impacts to fill embankments and existing infrastructure, and other existing features have not been evaluated to a sufficient extent with respect to feasibility and environmental or other impacts. 3

Response to Comments from the City of Newcastle

Comment Number	Response
1	Thank you for your comments regarding the proposed Tacoma–Cascade Pipeline (TCP). The Green Route Alternative is being considered as one of the alternatives for the TCP. Cascade would work with the City of Newcastle as the permitting agency to address impacts associated with the Green Route Alternative.
2	Comment noted. See Response No. 1. Table 1-2 of the Draft EIS indicates that there would be the potential for temporary, but significant unavoidable delays in traffic movement and circulation in work zone areas during construction. Potential detour routes would be required during construction along the Green Route Alternative. Cascade would coordinate with the City of Newcastle regarding the potential detour routes and applicable permits.
3	Comment noted. Geotechnical impacts related to construction along Coal Creek Parkway were considered during the route identification phase and were included in the evaluation and comparison of the various route alternatives (see Chapter 3 of the Draft EIS).

CITY OF RENTON
Community Services - Terry Higashiyama, Administrator
Nationally Accredited Agency
Kathy Keolker, Mayor

January 12, 2007

Michael A. Gagliardo, General Manager
Cascade Water Alliance
1400 - 112th Avenue SE, Suite 220
Bellevue, WA 98004

JAN 1 5 2006

Subject: Request for Comments on Draft Environmental Impact Statement
Cascade Regional Water Supply System
Tacoma-Cascade Pipeline

Dear Mr. Gagliardo:

Thank you for the opportunity to review and provide comments on the above-referenced document. Following are comments pertaining to City of Renton park facilities including the Maplewood Golf Course, Cedar River Trail and Ron Regis Park.

1. The Cedar River Trail and Ron Regis Park were constructed with State grant monies (Washington Wildlife and Recreation Program – WWRP) administered by the Interagency Committee for Outdoor Recreation (IAC). Approval for work in these areas, including temporary and permanent easements must first be approved and meet the requirements of the IAC. 1

2. Federal Land and Water Conservation Funds, administered by the IAC were utilized to acquire land now developed as Ron Regis Park and the east portion of the Maplewood Golf Course (holes 4-7). Approval for work within these facilities, including temporary and permanent easements, must be approved and meet the requirements of the National Park Service. 2

3. Federal Intermodal Surface Transportation Enhancement (ISTEA) grant funding was utilized to construct the Cedar River Trail. Approval for work within the Cedar River Trail, including temporary and permanent easements, etc., must be secured through the Washington State Department of Transportation. 3

4. Minimizing impacts to trail and park users is encouraged. Optimally, work for these areas should be scheduled during the winter months (November – February). 4

5. Construction impacting the Cedar River Trail must include signage describing the project, the timeframe for construction, and a contact name and number. 5

A signed and designated detour route providing for continuous access must be maintained. Detour route to be paved and maintained in a safe and ADA-accessible condition.

6. Access to Ron Regis Park must be maintained at all times for maintenance and recreational purposes. 6

7. Upon project completion, park facilities to be restored to original or better condition. 7

Thank you for your consideration. Should you have any questions, please do not hesitate to contact me at 425-430-6619.

Sincerely,

Leslie A. Betlach
Parks Director

C: Terry Higashiyama, Community Services Administrator
Kelly Beymer, Golf Course Manager
Terry Flatley, Parks Manager
Darrell Jennings, Interagency Committee for Outdoor Recreation

Response to Comments from the City of Renton

Comment Number	Response
1	Thank you for your comments regarding the proposed Tacoma–Cascade Pipeline. Comment noted. Cascade would coordinate all contractor work that could affect the Maplewood Golf Course, Cedar River Trail, and Ron Regis Park with the City of Renton, the Interagency Committee for Outdoor Recreation, the National Park Service, and the Washington State Department of Transportation, where appropriate.
2	Comment noted. See Response No. 1.
3	Comment noted. See Response No. 1.
4	Comment noted. Timing of construction to minimize impacts would be coordinated with permitting agencies and considered during final design.
5	Comment noted. Signage and detour requirements would be coordinated with permitting agencies, developed during final design, and included in the construction contract. Plans for potential detours would be reviewed with the City of Renton.
6	Comment noted. Access to Ron Regis Park would be maintained throughout construction.
7	Comment noted. Restoration would be coordinated with permitting agencies and developed during final design. Restoration requirements for the Cedar River Trail and other Renton Parks facilities would be reviewed with the City of Renton.

December 26, 2006

Mr. Michael A. Gagliardo, General Manager
Cascade Water Aliance

Subject: Comments on 'Central Segment Tranmission Pipeline'

Regarding the route for the proposed pipeline alternative along 156 th. Ave SE. The 220 volt electrical power feed for my residence at 24845 156th Ave. is supplied via an underground cable that crosses under 156 Th. Ave. from the Puget Sound Energy's Berrydale switching station across the street. Power interruption for my home exceeding several hours is very undesirable since it is needed for water, refrigeration, lighting and heat. 1

This is also the case for my neighbors the Gott family at 25007 156 th. Ave SE. 2

At about 24840 on 156 Th. Avenue SE. there is a twelve or eighteen inch culvert located five feet below the elevated road surface that drains several west pasture areas. 3

Another situation for consideration is a guarantied 24 hour access to the Berrydale switching station for Puget Sound Energy personnel by at least one of the two entrances. 4

Sincerely

Val Shrauner
24845 156 Th. Ave.
Kent , WA. 98042
(253) 631-9626
v.shrauner@comcast.net

Response to Comments from Val Shrauner

Comment Number	Response
1	Thank you for your comments regarding the proposed Tacoma–Cascade Pipeline. Survey and base mapping would show approximate locations of the electrical service for nearby properties. The contractor would be required to have an underground locating service mark the location prior to construction. The contractor would be required to locate and protect the electrical service during construction. The transmission pipeline would cross under most utilities because it would have 6 feet of cover. If the service lines were cut, the contractor would be required to promptly restore.
2	See Response No. 1.
3	Survey and base mapping would show approximate locations of the storm drain. The contractor would be required to have an underground locating service mark the locations prior to construction. The transmission pipeline would cross under this utility. The contractor would be required to protect the culvert during pipeline installation.
4	Emergency access would be maintained to at least one of the two switching station driveways. The public would be given advance notice of road and driveway closures as construction progressed.