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3.2 Air Air quality in and around the Columbia Gorge is generally improving.	Columbia River Gorge Air Study and Strategy; September 15 2011. Available at: http://www.deq.state.or.us/aq/gorgeair/	Nov-7-2011	• Current haze levels in the Gorge are not getting worse • Visibility levels are expected to improve over the coming decades	No Change	
3.3 Water Quality ODEQ and Ecology have listed the lower Columbia River, from river mile 146 (Bonneville Dam) to the mouth, as 303(d) impaired.	Oregon Water Quality Assessment Database, 2010 Integrated Report. Available at: http://www.deq.state.or.us/wq/assessment/rpt2010/search.asp Washington Water Quality Assessment, 2008. Assessment was approved by US EPA in January 2009. Available at: http://www.ecy.wa.gov/programs/wq/303d/2008/index.html	Nov-10-2011	• The lower Columbia River, from river mile 146 (Bonneville Dam) to the mouth, continues to be 303(d) impaired.	No Change	
3.4 Marine Mammals Three stocks present in action area. California sea lion U.S. stock (*Zalophus californianus*), Steller sea lion eastern DPS (*Eumetopias jubatus*), and harbor seal Oregon/Washington coastal stock (*Phoca vitulina*).	No new information.	Nov-22-2011		No Change	
California sea lion - Taxonomy and physical description. Breeding range, sexual maturity, breeding territoriality, California rookeries, breeding and pupping season. Post-breeding northward migration (males). Varied diet, opportunistic, (smelt, salmonids, rockfish, lamprey, herring) in the Columbia River. Population estimate (Carretta et al. 2007) 238,00, carrying capacity.	No new information.	Nov-22-2011		No Change	
Federal and state listing status, distribution in the project area, population abundance.	Carretta et al. 2011 http://www.nmfs.noaa.gov/pr/sars/draft.htm	Nov-22-2011	2011 Draft Stock Assessment Report population estimate 296,750, potential biological removal 9,200, standard logistic growth curve used to depict growth in pup counts. The population is not listed under the ESA, is not designated as depleted nor considered "strategic" under the MMPA.	Change – Population increased	California sea lion population and PBR increase does not alter the expected impacts of the proposed action on the sea lion population (≤1% of PBR) because the authorized take, while increasing to 92 animals per year, is limited to same proportion of PBR. In addition, the practical logistics of capture and removal limits removals to less than the upper limit analyzed in 2008.
Earliest known report of animals hauled	Stansell et al. 2011	Nov-22-2011	Distribution in the action area has extended as far upstream river mile	Change – A small number of	The extended distribution of California sea

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out at the dam from the 1970s. Observations at the dam increased beginning in 2000, dominant pinniped present and feeding on salmonids.			191, the Dalles Dam.	California sea lions at Bonneville Dam have moved above the dam foraging in the forebay and beyond.	lions above the dam does not alter the expected impacts of the proposed action on the sea lion population because sea lions observed upstream are a subset of animals observed below the dam and removal levels are capped at ≤1% of PBR. There are observations of animals upstream of the dam but predation events observed there are not recorded as part of the salmonid predation estimates because the observations are opportunistic. Nevertheless, predation by animals observed in the forebay should be considered as contributing to salmonid mortality at the facility. Animal C697 was known to kill salmonids above and below the dam and it can be assumed that all sea lions above the dam were at one time below the dam.
Likely more sea lions present than are observed. A subset of California sea lions, seen in any one year, return in subsequent years and are joined by new arrivals.	Stansell et al. 2011	Nov-22-2011 Dec-08-2011	California sea lions at the dam in 2011 are no longer dominant in abundance. California sea lions still dominate salmonid predation, taking more than two thirds of the observed catch. Overall predation declined, however, in 2011 for the first time since 2005.	Change – California sea lion predation on salmonids declined in 2011.	California sea lion predation is lower but still the majority of that observed. To the extent that removals contributed to the decreased predation by California sea lions observed in 2011 (1.2% of run) it is within the scope of the impacts of the action analyzed in 2008 (0.4 – 5.0% of run). It is unknown whether predation will rebound in 2012, however, reduced predation was a desired result of the removal program.
	Brown et al. 2008 Brown et al. 2009 Brown et al. 2010 Brown et al. 2011	Nov-22-2011	Non-lethal deterrence conducted from boats in the tailrace. California and Steller sea lions exposed to noise from pyrotechnics and vessel maneuvering. Some animals are exposed multiple times per day and/or over the course of a season. No Injuries noted. In 2008, Two Steller sea lions and three unauthorized California sea lions die in the traps. Enforcement investigation finds no evidence of human involvement in closing the traps.	Change – 38 California sea lions have been removed. Non-lethal hazing has been conducted for 4 more seasons. Accidental mortality in 2008 prompts equipment and procedural modifications, re-initiation of ESA Section 7 consultation.	Authorized California sea lion removals are within the limits described and analyzed in the 2008 EA. The new information does not alter the expected impacts of the proposed action on the population of California sea lions. Removals would remain capped at the same levels under the proposed action, i.e., no more than 1% PBR.
		Nov-22-2011	Removals: Year Captured/Eligible Transferred to Captive Died/Killed 2008 9 6 2 2009 16 4 11 2010 14 0 14 2011 5 0 1 Total 44 10 28		
California sea lion population has recovered and reached maximum net productivity level in 1997 and is at optimum sustainable population (OSP). Potential biological removal (PBR) level is 8,511 and annual human caused mortality from fisheries averaged 1,476 or	Carretta et al. 2011 http://www.nmfs.noaa.gov/pr/sars/draft.htm	Nov-22-2011	The new draft stock assessment report indicates that the California sea lion population is growing. The methodology for estimating the population abundance, based on pup counts, and for calculating the potential biological removal level based on N_{min}, have not changed but the new analysis incorporates a different growth curve (standard logistic growth curve) for the population than was used in the previous report (generalized logistic growth curve). The new stock	No Change	The alteration of the statistical model used for depicting the growth in pup counts does not alter the expected impacts of the proposed action on the sea lion population because the population continues to be robust and growing. The estimates of fishery related and other human-caused

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17.3% of PBR.			assessment report also reflects a shift in policy regarding publication of "optimum sustainable population" determinations in the scientific literature. The determination of optimum sustainable population status for the California sea lion population has yet to be published in the literature and therefore the new draft stock assessment has been revised to state that optimum sustainable population level has not been formally determined. Estimates of human caused fishery related mortality has declined.	No Change	mortally are considered to be minimum estimates but overall continue to be less than the potential biological removal level for the stock and thus within the range analyzed in 2008.
California sea lion counts fluctuated but increased overall from 30 in 2002 to 69 in 2007 with peak of 106 in 2003.	Stansell et al. 2011, Wright and Stansell 2011	Nov-22-2011	Counts fluctuated from 54 in 2009 to 89 in 2010 to 54 in 2011 but average daily attendance of California sea lions fell to 7.3 in 2011, the lowest since 2003. California sea lion average daily abundance was significantly lower statistically for the three years 2009-2011 than the preceding three years 2006-2008.	Change – Total abundance present is within the range previously observed but average daily abundance is lower.	The decrease in average daily abundance of California sea lions does not alter the expected impacts of the proposed action because not all of the sea lions observed at the dam over the course of the year are there simultaneously and deterrence measures or removals are opportunistic from the subset of animals present on a given day. Some animals will be exposed multiple times per day while others may only be exposed a few times per season based upon frequency of attendance. The average daily abundance is significantly lower but the total abundance (54, 89, 54) is within the range analyzed in 2008 (30 – 106)
Steller sea lion - Taxonomy and physical description. Breeding range, sexual maturity, Oregon rookeries, breeding territoriality, breeding and pupping season. Year around residents in Oregon and Washington, post breeding dispersal. Varied diet, opportunistic, haul-out selection.	No new information.	Nov-22-2011		No Change	
Population estimate 47,885, ESA listed (threatened) MMPA depleted.	Allen and Angliss 2010 http://www.nmfs.noaa.gov/pr/sars/region.htm	Nov-22-2-11	2010 Stock Assessment Report population estimate of Steller sea lions is 52,847. Petition to delist received and response in preparation.	Change – Population increase	Steller sea lion population increase does not alter the expected impacts of the proposed action on individual sea lions or the population. The number of individual Steller sea lions at the dam is a small fraction of the total population. Temporary displacement of individual animals from the foraging area immediately below the dam occurs as anticipated in the 2008 analysis. Animals have grown tolerant and some portion of the individuals displaced simply move from one location in the tailrace to another to avoid hazing. Many return from day to day and year to year. The number of individual Steller sea lions at the dam has increased indicating that the anticipated effects of temporary disturbance or

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					displacement are not sufficient to exclude the animals from the area and impacts of the action were below those anticipated.
Federal and state listing status, distribution in the project area.	No new information.			No Change	
Abundance in the project area is increasing, haul out locations, salmonid consumption by Steller sea lions is variable but far less than California sea lions. Majority of sturgeon consumed by pinnipeds at the dam are taken by Steller sea lions.	Stansell et al. 2011 Brown et al.2008	Nov-22-2011 Dec-9-2011	Steller sea lion numbers at the dam have increased and outnumbered California sea lions in 2011. Salmonid consumption by Steller sea lions has also increased to about one third of the total catch by pinnipeds. Steller sea lions consume the majority of sturgeon taken at the dam. In 2008 Steller sea lions showed increased tolerance to hazing and numbers in the tailrace increased. The result was an increased number of harassment takes. Unanticipated mortality of two Stellers accidental trap incident.	Change – Presence at the dam, sturgeon and salmonid consumption increased. Un-anticipated mortality in accidental trap incident.	The increase in numbers of Steller sea lions at the dam does not alter the expected impacts of the proposed action on individual sea lions or the population because the kinds of impacts (sound exposure, temporary displacement) are minor and have been shown to be inconsequential to the local abundance of individually recognized Steller sea lions and overall number present. The accidental mortality event and increased tolerance to non-lethal hazing, observed in 2008, prompted re-initiation of ESA Section 7 consultation, analysis and a new take estimate. The number of animals present at the dam is a small fraction of the total population range wide and there is ample foraging opportunity elsewhere in the Columbia River and rangewide to accommodate these animals. Predation by Stellers on sturgeon and salmonids grew despite hazing efforts. Predation on salmonids is higher than previously observed but still less than California sea lions. Overall the impact of the action on Steller sea lions appears lower than anticipated. Actions to displace or remove Steller sea lions cannot escalate beyond non-lethal deterrence because lethal take is not authorized for this species.
Harbor seal - Taxonomy, distribution, and physical description. Non-migratory movements, presence in the Columbia River estuary, breeding and pupping. Year around residents in Oregon and Washington, post breeding dispersal. Variable and diverse diet. Population estimate (Carretta et al. 2007) 24,732 is old but considered within OSP.	Allen and Angliss 2010 http://www.nmfs.noaa.gov/pr/sars/region.htm	Nov-22-2011		No Change	
Factors affecting abundance of pinnipeds at Bonneville Dam – The seasonal presence of salmonids, tolerance and avoidance of exposure to non-lethal hazing, presence of larger numbers of pinnipeds elsewhere in the estuary, and the availability of alternative prey such as	No new information.	Nov-22-2011		Change	(See California sea lion and Steller sea lion summaries above.)

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sturgeon, lamprey and shad . Fecal analysis indicates that salmonids are the preferred prey of California sea lions and sturgeon are preferred by Steller sea lions. Boat and shore based hazing are used at the dam, sea lions continue to adapt to hazing, hazing has not produced an appreciable effect on predation rate. Steller sea lions reacted differently to non-lethal hazing than California sea lions, observed numbers declined with hazing and sturgeon predation decreased with hazing.	Stansell et al. 2011 ESA Section 7 Consultation No. 2008/08780	Nov-22-2011	See Steller sea lion summary above.	Change – New take estimate.	Impacts to Steller sea lions, which include temporary displacement, exposure to noise and vessels, were within or below the range anticipated in the 2008 analysis. New take estimate developed in Section 7 Consultation and takes have remained within range analyzed.
3.5 Listed Salmonids NMFS considers an ESU to be a DPS and thus a species under the ESA. There are 13 ESU/DPSs listed as threatened or endangered in the Columbia Basin. Eleven overlap the action area and 5 have run timing coincident with the presence of sea lions in the action area.	http://www.nwr.noaa.gov/ESA-Salmon-Listings/5-yr-review.cfm	Nov-22-2011	The listing status of Columbia River salmonids was reaffirmed in a five year status review published Aug-15-2011.	Change – Status review updates listing information, however all stocks retain status described in 2008 analysis.	The updated status information does not alter the expected impacts of the proposed action on listed Columbia Basin salmonids. The listing status and threats were reaffirmed during a five year status review that was completed in 2011. In spite of some improvements referenced in the status reviews, predation remains a secondary threat for all ESU/DPSs that migrate through the estuary therefore the impacts and benefits of the proposed action are within the range of impacts analyzed in 2008.
The five runs coincident with sea lion presence are upper Columbia River spring Chinook, Snake River spring/summer Chinook, Snake River Basin steelhead, middle Columbia River steelhead, lower Columbia River steelhead.	No new information.	Nov-22-2011	The life history, species description, status, and potentially affected population information are as described in 2008.	No Change	
The ESA requires development and implementation of Recovery Plan. NMFS convened take reduction teams and invited public participation to develop Recovery Plans. Federal agencies must consult with NMFS to determine whether and to what degree action my affect listed species. NMFS consults on a host of actions.	No new information.	Nov-22-2011		No Change	
Viability standards for abundance and productivity were developed by take reduction teams to assess the level of individual salmonid population's extinction risk. An "acceptable" or "low" risk level is defined as ≤ 5% probability	No new information.	Nov-22-2011		No Change	

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of extinction in 100 years. A "moderate" risk is defined as 5% to 25% extinction probability in 100 years and a "high" risk is defined as >25% extinction probability in 100 years. Extinction risk was assessed for 54 populations in the Columbia and Snake River basins.					
A final recovery plan is in place for upper Columbia River spring Chinook. Interim recovery plans are in place for middle and lower Columbia River steelhead and recovery plans are being drafted for Snake River spring/summer Chinook and Snake River Basin steelhead.	http://www.nwr.noaa.gov/Publications/FR-Notices/2009/loader.cfm?csModule=security/getfile&pageid=44562	Nov-22-2011	Final recovery plan adopted for mid-Columbia River steelhead Sep-30-2009.	Change – Interim recovery plan replaced by final document.	The adoption of a Final Recovery Plan for mid-Columbia steelhead does not alter the expected impacts of the proposed action on the steelhead stock. The final plan reiterates that predation is one of many factors affecting the recovery of the DPS.
Predation listed among the high priority factors limiting recovery of ESA listed salmonids.	No new information.	Nov-22-2011		No Change	
Survival improvements from implemented and ongoing conservation measures.	Wright and Stansell 2011; Stansell et al. 2011	Nov-22-2011	California sea lion presence declined and predation dropped in 2011.	Change – Presence of California sea lions was lower in 2009-2011 than 2006-2008. Predation on salmonids dropped in 2011	The decline in California sea lion presence does not alter the expected impacts of the proposed action on listed salmonids. It is too early to tell if reductions in California sea lions will have a lasting beneficial effect on salmonid survival because overall California sea lion abundance is still within the range analyzed in 2008. It is unclear if the drop in predation in 2011 is related to removals, lower California sea lion presence, inter-species competition with Steller sea lions, or other environmental factors.
3.6 Other Fish Species					
Non-listed Spring-run Chinook Stocks	No new information.	Nov-22-2011		No Change	
White Sturgeon - Present in the Columbia River year around from the mouth upstream to the Kootenai River. Two groups present in the action area. Population healthy and supporting largest sport and commercial fisheries (42,000 fish annually) in the Columbia Basin. Population of 36 to 60 inch (sub-adult) fish estimated at 297,450 fish and 60 to 72 inch "large broodstock" fish at 7,743. Population considered at low risk.	ODFW 2011	Nov-22-2011	Population estimate in 2011 89,000 sub-adults, 11,000 adults. Harvest guideline reduced.	Change – Population declining	White sturgeon are declining and adjustments are being made to recreational and commercial harvest guidelines to assist recovery. Some possible beneficial effects from disturbance and displacement of predatory Steller sea lions were anticipated incidental to the California sea lion removal action, however, the benefits did not materialize. There is no evidence of direct impacts on sturgeon from the removal action and the decline in sturgeon population does not alter the expected impact of the proposed action on the sturgeon resource.
Lamprey - Pacific lamprey populations can be highly variable but adult lamprey counts have decreased dramatically at all	Luzier et al. 2011	Nov-22-2011	Lamprey - Pacific lamprey populations in the Columbia River are considered at "high risk" in the mid & upper Columbia and Snake Rivers and at somewhat lower risk in the lower Columbia River.	Change – Recent population assessment and conservation initiatives are being developed.	The current status of lamprey does not alter the expected impacts of the proposed action on the lamprey resource. Safety measures

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Columbia River dams in recent years.			Threats to lamprey recovery include barriers to passage, water quality, stream and floodplain degradation. Counts at Bonneville Dam have varied from fewer than 20,000 in 2000 to over 100,000 in 2003 and back down to about 11,000 in 2010.		in place for listed salmonids will also protect other non-listed species in the tailrace including lamprey.
Shad - American shad, returning to the Columbia River, totaled over 4 million fish by 1990 and the average return over the past 10 years has been 3 million fish.	Parsley et al. 2011	Nov-22-2011	Returns declined to 1 million in 2010 following record return in 2005.	Change – population fluctuates widely	The current status of the shad population does not change the expected impacts of the proposed action on the shad resource. Safety measures in place for listed salmonids will also protect other non-listed species in the tailrace including shad.
3.7 Fish Habitat					
Essential Fish habitat is defined for salmonids under the Magnuson-Stevens Fishery Conservation and Management Act and includes the action area. Freshwater habitat at Bonneville Dam has been highly altered and degraded.	No new information.	Nov-22-2011		No Change	
Critical habitat has been designated under the Endangered Species Act for all listed salmonids that are potentially affected by the action.	No new information.	Nov-22-2011		No Change	
New Information - Critical habitat has been designated for eulachon.	**http://www.nwr.noaa.gov/Other-Marine-Species/Eulachon.cfm**	Nov-22-2-11	Final Critical Habitat Federal Register Notice Oct-20-2011	Change – new critical habitat	Critical habitat designation does not change the expected impact of the proposed action on eulachon habitat. Eulachon habitat overlaps designated critical habitat for listed salmonids and effects of the action will fall within the range of effects from the action on salmonid habitat as expressed in the 2008 analysis.
3.8 Terrestrial Wildlife and Birds					
Various federal, state, and local regulations address wildlife protection, including protection of threatened, endangered, and sensitive fish and wildlife in the project area. Operations at Bonneville Dam are designed to comply with these laws and regulations.	No new information. **Federal** Federal Endangered Species Act Marine Mammal Protection Act Migratory Bird Treaty Act and Executive Order 13186 The Bald and Golden Eagle Protection Act Fish and Wildlife Coordination Act Animal Damage Control Act **State** Washington State list of endangered, threatened, and sensitive species Oregon State Endangered Species Act **Local** County sensitive Areas Ordinances and Comprehensive Plans	Nov-7-2011		No Change	

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3.9 General Vegetation The shoreline in the project area is degraded by developed and filled lands resulting from dam and facility construction, river fluctuations that inundate the shoreline, and ongoing maintenance activities. The original shoreline around Bonneville Dam exists only as part of the Fort Cascades National Historic Site and Trail.	No new information.	Nov-7-2011		No Change	
3.10 Social and Economic Resources The Columbia River Gorge National Scenic Area designated for special protection spans 292,500 acres on both sides of the Columbia. The Bonneville Lock and Dam is an Urban Area exempt from Scenic Area regulations.	No new information.	Nov-8-2011		No Change	
The Corps maintains a system of navigation locks, including the Bonneville Lock and Dam, along the Columbia-Snake Inland Waterway to Lewiston, Idaho supporting: • 10 million tons commercial cargo annually • An estimated $1.5 to $2 billion annually • More than 40,000 jobs in the region	PNWA (Pacific Northwest Waterways Association). 2011. Columbia Snake River System Facts. Webpage accessed November 8, 2011. Available at: http://www.pnwa.net/new/Articles/CSRSFactSheet.pdf	Nov-8-2011	• 10 million tons commercial cargo annually • An estimated $3 billion annually • 40,000 jobs in the region	Change – an estimated $3 billion annually vs $1.5-2 billion annually	No new mainstem Columbia River dams or navigation locks have been built or removed since 2008. While the commerce value has increased recently the current values falls within the scope of impacts assessed in the 2008 analysis and the proposed action continues to have little impact on this resource. New data does not represent significant new circumstances or information per CEQ's regulations at 40 C.F.R. 1502.09(c)(1)(ii).
3.11 Tourism and Recreation Tourism and recreational areas around the Bonneville Lock and Dam and Lake Bonneville include the Bradford Visitor Center and the Washington Shore Visitor Complex, four fishing areas maintained by the Corps in the project area, the Fort Cascades Historic Site and Trail, and any other public area within the project area. The two visitor centers and immediate fishing areas draw approximately 1 million visits annually. The Bonneville Dam facilities and reservoir drew nearly 2.74 million recreational visits in fiscal year 2005.	Norris, Robin (pers comm.). 2011. USACE. Bradford Island Visitor Center, Bonneville Lock and Dam (1-541-374-4563), November 8, 2011.	Nov-8-2011	• The two visitor centers and immediate fishing areas (i.e., Tanner Creek, Robbins Island, Bradford Island, and the Washington Shore) drew 910,216 visits in FY 2011. • The Bonneville Dam facilities over the greater 40-mile long reservoir (whole and locally) drew 2,894,744 recreational visits in fiscal year 2011.	Change – slightly fewer visitors to the two visitor centers and immediate fishing areas, and slightly more recreational visitors to the Bonneville Dam facilities over the greater 40-mile long reservoir (whole and locally) in fiscal year 2011.	Visitation opportunities remain about the same now as they did in 2008. The number of visitors using the area falls within the scope of impacts assessed in the 2008 analysis. New data does not represent significant new circumstances or information per CEQ's regulations at 40 C.F.R. 1502.09(c)(1)(ii).

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3.12 Cultural Resources					
Historic Designations: The Bonneville Project, which is within the action area, includes two primary historic designations: (1) Bonneville Lock and Dam, and (2) Fort Cascades National Historic Site.	No new information.	Nov-9-2011		No Change	
Tribal Interests: Native Americans have a vested cultural, religious, and economic interest in lands around the Bonneville Project. Public Law 100-581 directs the Secretary of the Army to identify, develop and improve Treaty fishing access sites known as "in-lieu" sites for transfer to the Department of the Interior. The Corps has continued to build sites along the Columbia River for use by treaty tribes, including designation of an in-lieu site approximately one mile upstream of Bonneville Dam on the Washington shore.	No new information.	Nov-9-2011		No Change	
3.13 Noise					
Noise levels at the Bonneville Project fluctuate with transportation-related noise as the primary input to ambient levels. With major roadways and railways on both the Oregon and Washington sides of the project, highway traffic and railcars are constant inputs. In addition, there is transportation-related noise from the Columbia River due to traffic moving through the navigation lock – towboat and vessel horns and alarms as they navigate waters also used by recreational boaters.	No new information.	Nov-9-2011		No Change	
3.14 Aesthetics					
The Columbia River Gorge with its diverse array of landscapes including rain forests, rolling farmlands, and semi-arid grasslands is a National Scenic Area. The Bonneville Project is located in this setting between Cascades Locks, Oregon and North Bonneville, Washington. Additional components of the river's aesthetic environment include fishing activities, river traffic, and lock operations.	No new information.	Nov-9-2011		No Change	
3.15 Transportation					
The Columbia River system is the Northwest's inland river highway	No new information.	Nov-14-2011		No Change	

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<tr><td>representing the only route from the Pacific Coast to the Columbia-Snake River Basin interior region.</td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>Running parallel to the Columbia River on the Oregon side is a major roadway, Interstate 84, and railway – the Oregon Union Pacific Railroad.</td><td>No new information.</td><td>Nov-14-2011</td><td></td><td>No Change</td><td></td></tr>
<tr><td>Running parallel to the Columbia River on the Washington side is a major roadway, State Highway 14, and railway – Washington Burlington Northern Santa Fe Railroad Company</td><td>No new information.</td><td>Nov-14-2011</td><td></td><td>No Change</td><td></td></tr>
<tr><td>For Oregon, See Table 3-15-1 Average hourly traffic volume (number of vehicles/hour) during daylight hours on I-84 through the Columbia Gorge, January to May 2006 (NMFS 2008).</td><td>ODOT’s traffic data website
http://www.oregon.gov/ODOT/TD/TDATA/tsm/tvt.shtml (accessed November 14, 2011)</td><td>Nov-14-2011</td><td>ODOT’s traffic data website
http://www.oregon.gov/ODOT/TD/TDATA/tsm/tvt.shtml (accessed November 14, 2011) focuses on daily, rather than hourly averages, and does not differentiate between eastbound and westbound traffic.

For the Rowena Station (#33-001), the average daily traffic in 2010 was 20,760 vehicles, which is very close to the corresponding value in 2006 (20,518 vehicles – a difference of about 1%). The average daily traffic (ADT) volume at that station from 2001 to 2010 ranged between 19,084 (2001) and 20,867 (2007), a range of about 1,800 vehicles (about 9% of the 2011 total). Compared to that overall range of variability, the difference between 2006 and 2010 (242 vehicles) is minor.

The data from the Troutdale Station (#26-001) tell a similar story: the ADT ranged from 27,392 (2001) to 29,637 (2010), a range of 2,245 vehicles (about 8% of the 2010 total). The difference between 2010 and 2006 was 677 vehicles, or about 2% of the 2006 total.</td><td>Change – but no substantial change in traffic volumes between 2006 and 2010.</td><td>Falls within the scope of impacts assessed in the 2008 analysis. New data does not represent significant new circumstances or information per CEQ’s regulations at 40 C.F.R. 1502.09(c)(1)(ii).</td></tr>
<tr><td>For Washington, See Table 3-15-2 Average hourly traffic volume (number of vehicles/hour) during daylight hours on SR-14 through the Columbia Gorge, January to May 2006 (NMFS 2008).</td><td>WSDOT’s annual traffic report for 2010 available at
http://www.wsdot.wa.gov/mapsdata/travel/pdf/Annual_Traffic_Report_2010.pdf (accessed Nov 14, 2011).</td><td>Nov-14-2011</td><td>WSDOT’s annual traffic report for 2010 available at
http://www.wsdot.wa.gov/mapsdata/travel/pdf/Annual_Traffic_Report_2010.pdf accessed November 14, 2011, turned up the following numbers for the traffic counters at Washougal and Maryhill:

Average daily traffic volume
<table><tr><th>Site</th><th>2006</th><th>2007</th><th>2008</th></tr><tr><td>Washougal</td><td>6200*</td><td>6100*</td><td>5700</td></tr><tr><td>Maryhill</td><td>2000*</td><td>2100*</td><td>4100*</td></tr></table>
Asterisks indicate actual counts; other values are estimated through some arcane process understood only by the traffic data analysts at WSDOT.

Similar to the numbers from the Oregon side of the Columbia River, these data do not show much change from 2006 to 2010. Traffic data analysts can not offer any kind of explanation for the spike at Maryhill in 2008. The range of variability at Washougal between 2006 and 2010 was 500 vehicles per day, which is about 8% of the</td><td>Change – but no substantial change in traffic volumes between 2006 and 2010.</td><td>Falls within the scope of impacts assessed in the the 2008 analysis. New data does not represent significant new circumstances or information per CEQ’s regulations at 40 C.F.R. 1502.09(c)(1)(ii).</td></tr>
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			2006 total. The 2010 average (6000) was about 3.2% less than the 2006 total. If one ignores the aberrant spike in 2008, the range of variability at Maryhill during the same period was 100 vehicles per day, or 2% of the 2006 total. The 2010 total was no different. If one includes the 2008 value, the range of variability bumps up to about 100%.		
3.16 Public Services					
Law Enforcement: The Corps has access to multiple law enforcement services in both Oregon and Washington.	No new information.	Nov-14-2011		No Change	
In Oregon, the Oregon State Police enforce game and fish regulations, and the Corps contracts with them for law enforcement of the fishing areas (primarily) and other public areas	No new information.	Nov-14-2001		No Change	
In Washington, the Corps' primary law enforcement contract is with the Skamania County Sheriffs office located in Stevenson, Washington. The WDFW enforces fish and game regulations and officers regularly review in the Washington Shore area.	No new information.	Nov-14-2011		No Change	
Fire: The Bonneville Project, which is in the action area, is served by three fire departments in neighboring towns -- North Bonneville (Washington, downstream) is the closest and has a small volunteer fire crew. Cascade Locks (Oregon, upstream) also has a volunteer fire crew. Stevenson (Washington, upstream) has the largest fire crew with professional fire fighting capacity. The Corps maintain a fire truck on site for immediate response at the Bonneville Project.	No new information.	Nov-14-2011		No Change	
3.17 Safety and Human Health					
The Bonneville Project is a secure and gated facility, open to the public 362 days a year.	No new information.	Nov-14-2011		No Change	
The Corps has an established Bonneville Safety Program, revised in 2006, which outlines the general structure of the safety and occupation health program that supports the provision of safe and healthful workplaces, procedures and equipment applicable to project staff, official visitors, contractors, and members	Mettler, Rick (pers.com). 2011. USACE Safety Coordinator (1-541-374-4571). December 5, 2011.	Dec-5-2011		No Change	

Resources & 2008 EA Summary	Data Sources for Updated Information	Date Reviewed	Data Review Summary	No Change/ Change with Description	Relationship to 2008 Impact Analysis
of the public engaged in recreational activities at the Bonneville Project					

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