Cedar River Watershed Habitat Conservation Plan
Oversight Committee
Semi-Annual Meeting

Tuesday, December 3, 2013
8:45 a.m. to 11:30

Conference Room 5965/5975, 59th Floor
Seattle Municipal Tower
700 Fifth Avenue, Seattle Public Utilities

Minutes

Attendees:

Members:	Staff:
Cyndy Holtz	Suzy Flagor
Jim Erckmann	Tom Fox
Chris Konrad	Rand Little
Buck Smith	Paul Faulds
Dave Beauchamp	Michele Koehler
Matt Longenbaugh	Amy LaBarge
Richard Bigley	Dave Beedle
Isabel Tinoco	Jesse Narog
Frank Urabeck	Liz Ablow
Aaron Bosworth	Crystal Raymond
Keri Pravitz	Nancy Ahern

Approval of agenda -
Motion: Jim Erckmann
Second: Dave Beauchamp
Vote: Carried unanimously

The following Introductions were presented:
Keri Pravitz, Executive Director, Friends of the Cedar River Watershed
Crystal Raymond, Seattle City Light, Climate Scientist
Jesse Narog, SPU Watershed Service Division, Road Engineer

Suzy presented Amy LaBarge with an engraved stone in recognition of completion of the HCP Restoration Thinning program. Amy acknowledged all of the staff who contributed to making the program a success.

Approval of minutes of June 10, 2013 –
Motion: Frank Urabeck
Second: Jim Erckmann
Vote: Carried unanimously

Water supply update – Tom Fox presented. All indicators are good in the water supply system. Both Tolt and Cedar storage at about average. Cedar storage slightly above average. There's been average rainfall for this time of year. Provided graph of inflows on an 8-week moving average, does not reflect flows from last Sunday adequately. Overall, we are well above minimum required flows. Precipitation and temperature forecasts are average. Provided graph illustrating that river management prevented 4000 c.f.s. plus flows at Renton, protecting redds (2200 c.f.s. is flow redd scour limit).

Frank asked if any sockeye redds have been dewatered, and reference higher spawning Chinook redds and possibly dewatering. Tom replied that SPU does not survey sockeye redds but there were not many sockeye redds observed at higher elevations. Our current focus is on keeping Chinook redds watered. Efforts to protect Chinook will also protect sockeye.

Fish Passage Update – Michele Koehler presented. Michele provided brief background on fish passage facilities and operations. She provided a schematic diagram of the facilities. She explained that 262 chinook (estimate at this point) were passed above Landsburg Dam this year. The highest count was almost 400 in 2007. Almost 2000 Chinook have passed so far since 2003, including hatchery and wild fish. We haven't been counting coho through the entire run since 2010, so we have only estimates for these years. Use fish camera data to verify estimates. A student from the UW is taking on the backlog of camera data as his capstone project, so we will get true numbers for last four years through that. Approximately 4200 coho have passed dam since 2003. Research by Quinn, Anderson, Kiffney from 2003 thru 2010 provides good parentage and reproductive success information which is informing efforts on other river systems such as the Elwah and White Salmon Rivers.

Restoration Thinning Program Review –Amy LaBarge provided an overview of the program and introduced Bill Richards. Amy reviewed overall program goals (thin approximately10,000 acres by 2015) and explained that the program is intended to accelerate development of forests from a dense, competitive exclusion state to more structurally complex and species rich forests. Bill explained that more complex prescriptions were used as over the program's term, to achieve certain benefits such as fuel reduction and increasing habitat benefit. Also over time logging units decreased in size. Bill presented an aerial image illustrating simple thinning treatments used during the early years of the HCP, instead of more variable prescriptions used later on for species benefit. He also showed areas with variable density treatments. Richard Bigley asked what the scale and size of gaps were. Bill answered that the gaps are 105 feet in diameter and range from 75 to 150 feet overall. Bill presented ground level photographs comparing before after treatment. Frank asked if there is any indication forest treatments are having an impact on wildlife, particularly on deer and elk. Bill replied that SPU doesn't monitor deer and elk populations but the Muckleshoot Indian Tribe does study this. However, he suspects that thinning treatments do benefit deer and elk. However, in long run these treatments are intended to benefit all species. The data showed that huckleberry coverage increased initially after thinning in all plots, but was mixed after nine years for various reasons (some up, some down), one being canopy closure. 4300 acres of young forest we didn't thin for various reasons (too young, already patchy distributions, limited road access). Bill explained that contractor costs increased as a result of more complicated thinning and slash treatment. A total of $4.1 million was spent overall. Matt Longenbaugh asked if there is need for more thinning in the long term. Bill replied that there are still many stands that are in between restoration and ecological thinning ages. These stands could benefit from treatment but funds are not available for this. Matt inquired if there is information about changed

hydrology that would support more thinning, such as impacts on snow melt. Amy replied that there was work conducted by the University of Washington (Civil and Environmental Engineering) that looked at the role of different forest type structures, gaps, so some preliminary information exists, but results vary depending on the forest type. Buck Smith asked if the costs presented were offset by timber sale revenue. Bill explained that there is no commercial value to the trees cut under this program because they are too small. Most of the trees were dropped and left. Jim Erckmann explained that this is called pre-commercial thinning in the timber production industry, but since the HCP program is not commercial we called it Restoration Thinning. Dave Beauchamp asked what metrics are used to track the long term benefits (e.g., do we use photographic records). Bill explained that Huckleberry coverage is one metric we use, and we use other metrics. We established a system of sample plots so we can monitor these over time. Metrics include tree growth, diversity, and understory response. We expect the canopy to close in over time so at some point will shade out understory again. It is known that pre-commercial thinning increases tree growth. Amy pointed out that, in addition to the permanent sample plots, we did a little effectiveness monitoring a few years ago, which is where huckleberry data came from. This effort provides some richer data. Chris Konrad asked if there is any evidence of unwanted species coming in. Bill replied that most stands are dominated by silver fir. We choose dominant species to thin, but even after thinning silver fir is still the dominant species. Less abundant species include western white pine, Douglas fir, yew. We try to maintain these less dominant species but still silver fir generally dominates. Frank asked that since the no logging policy was established what are long term benefits of this program, in summary. Bill answered that it's a HCP to move these stands beyond the stem exclusion stage, but this condition could persist for decades. In general in these stands there is not much bird life, little complex understory. This program seeks to spread trees out to keep them growing and into next stage; to get through the stem exclusion stage. Elk and deer will be able to forage for some time until these stands close up again. There is much more diversity now than there used to be. Richard Bigley pointed out that this program as a whole is regionally recognized for its leadership in forest restoration. It didn't exist in commercial forestry; now it exists on many private and public lands. Leaders should be commended. He also pointed out that young stand "pre-commercial thinning is just a temporary fix. Wider spacings will jump over competitive exclusion stages but much of it will grow up and go into competitive exclusion stage again (shade tolerant species) so we maybe bought 15 or 20 years before they close up again. The remaining trees will just be bigger. Without subsequent thinning they'll remain that way for a longer time.

Stream Crossings for Fish Passage Program Review – Dave Beedle, watershed hydrologist, presented. This program began in 2000. It was been a collaboration between Dave and watershed other hydrologists, operations staff, and road engineering staff. The approached used to prioritize projects: address the worst blockages first. Buck Smith asked if we used "off the shelf" structures for stream crossing projects. Dave indicated that they do. In these cases, we specify the weight rating and they deliver on site to specifications (pick it up off flat bed and put on stream) . The program opened up 9.5 miles of stream to fish. Jim Erckmann asked if the program is finished. Dave explained that there is one more resident fish crossing that has minimal habitat upstream and would required an expensive structure. We will be discussing this with regulators. Frank Urabeck asked if are monitoring of fish population response is being conducted, such as the work at Walsh lake with coho response. Dave answered that the fish monitoring work under the HCP has been completed so we are not doing this monitoring now. However, when fish studies were being conducted we did not document populations but did document whether fish were using newly accessible habitat or not. In most cases fish used

newly accessible habitat immediately. Some fish were moving through immediately after the barrier was removed but before we put the new structure on top. Dave Beauchamp asked if there are. any plans to publish this outside of HCP process in scientific literature or beyond. It would be a wonderful contribution that other property owners doesn't have such programs in place, such as the US Forest Service and private timber companies; these could benefit from the evaluation of these alternatives and the positive fish response. Dave Beedle agreed. Jim asked if the bridges could be reused, and Dave replied that bridges are reused whenever possible and this is a low-cost and fairly simple solution.. Bridges last 75 years and when roads are decommissioned, bridges can be picked up and used elsewhere on another stream. Dave explained that bridges up to 60 feet in length can be installed by Watershed Services crews which saves money compared to hiring a contractor. Tom asked if we use any minimum criteria for flow. Dave explained that in general their specifications require structures to pass 100 year flows. For some bigger structures/bridges, on steeper streams affected by debris flows we used a six-foot clearance between 100 year flow and bottom of bridge (our own rule of thumb) to protect the bridge.

Climate Subcommittee Report – Jim Erckmann presented. Jim explained that the HCP planned for some circumstances but not climate change (unforeseen circumstance). We realize some effect of climate could impede our ability to achieve HCP goals. (See handout for such goals). There is most concern about early snowmelt, longer summers, etc. (see list). Chris Konrad discussed current focus of subcommittee and explained efforts to assess the risk of different impacts (matrix). Now trying to go through that list of impacts, then determine at which point along this risk management continuum are we at. To better understand each risk we are asking questions such as: do we have early warning indicators, are there early management responses in place, etc. First steps for the subcommittee at this point is to determine where are we on this continuum. Second important step is to determine early warning indicators and management responses. Some impacts could effect HCP commitments and some that could go beyond scope of HCP. At this point the subcommittee determined HCP vs. non-HCP impacts, maybe will do this when we get down to recommendations. We are also developing focused workshops (wildfire, bull trout threats). We plan to bring concrete recommendations to Oversight Committee in June possibly. Chris pointed out the list of types of recommendations subcommittee might be making.. The subcommittee would really like to engage the Oversight Committee on this topic. Jim referred to Richard Bigley's use of the term "rules are changing" meaning that the presumed rules at beginning of the HCP may not still apply, and we need to understand what are new set of rules. Jim pointed out the research and monitoring bullet on list. The change from old rules to new rules might mean a different research and monitoring would be called for. Matt Longenbaugh commented that it makes sense that after more than 10 years of implementation to re-look at a lot of these things. This is a key issue not given a lot of consideration. It makes sense to look at entire suite of HCP activities and possibly re-open for discussion. Richard Bigley added that recommendations could be relatively simple and said that he'd forgotten that whole upper watershed is almost entirely monoculture. In the southern Cascades we are seeing the Balsam Woolley Adelgid, which is a non-native insect that defoliates true fir species, including Pacific silver fir. That tree dominates the species composition in the upper watershed and exhibits evidence of BWA already. If insect behavior (reproductive success) or tree susceptibility changes, then impacts could increase. What will its behavior be in another 20 or 30 years? We may have a vulnerable area of the watershed that could have heavy mortality. Dave Beauchamp pointed out that on anadromous fish side the high temperatures in the ship canal may be outside HCP purview, but impacts species covered under the HCP. Already this environment is marginal for adult

returning fish. With hotter, drier summers than normal, adult sockeye and juvenile coho and Chinook would be vulnerable. This could be absolute thermal obstacle and reduce survival. There are processes in place that we need to be tracking and try to influence those that have jurisdiction. Also this can affect the work we do in watershed that does provide benefit to these species. Jim asked the committee what next steps they'd recommend. Chris asked about are you thinking about an effort to review HCP monitoring activities. This should wait until the June Oversight Committee meeting. The subcommittee needs to identify early warning indicators. Then once we have that list we will look to see if current HCP activities cover this and if not then see how we can switch. Keri Pravitz suggested that at the June meeting there could be in depth conversation. Frank Urabeck added to what Dave Beauchamp's comment about the ship canal and explained that he'd understood that the Army Corps of Engineers is conducting a biological assessment at the locks.

Chris offered next steps. The subcommittee will move forward with ideas for mini workshops, and at the June meeting bring recommendations to the Oversight Committee.

Rainbow Bend/Downstream Habitat Project Report – Cyndy Holtz and Jon Hansen (King County) presented. Cyndy provided an status briefing of the Downstream Habitat Protection and Restoration program. Jon Hansen updated the committee on the Rainbow Bend floodplain reconnection project. Nancy Ahern asked if there is any public access built into project? Jon explained that for safety reasons and budget recreation is not provided on this site. Vehicular access is restricted by a gate. King county is accommodate portage across the river from the restoration area, however. Dave Beauchamp asked what was the fate of septic tanks and other such infrastructure. Jon explained that these were pulled out during demolition of the mobile home park prior to the restoration project, and a few left over were removed as part of the project, including some drinking water wells. The mobile home park had a giant sand filter septic drain field that had to be excavated. Buck Smith recalled asked about the one property owner who didn't want to sell. Jon explained how residents loved being out there and one owner of two parcels did not want to leave so the King County Flood Control District did use condemnation. King County already invested over $11 million to acquire all of the other properties. Dave Beauchamp asked what if any role FEMA played. FEMA provided early grant funding for land acquisition. Jon listed off different funding sources, including FEMA. Buck Smith asked if the mobile homes were still usable. All of the units were too old and substandard to re-used so they were demolished. Jesse Narog asked who did the final earth work? Jansen was the contractor and the project was managed by SPU Construction Management. Dave Beauchamp mentioned that back in the 1980s Sally Abella conducted a study that looked at percentage of stream bank revetments on the lower Cedar River. It would be valuable to show this to the public to illustrate the tangible momentum, and improvements made so far. Jon agreed and explained that King County conducted a focused education and outreach effort at the front end of the project. We need to continue that message forward. The benefits are not just for fish but also for the safety of the families and moving them out of harm's way. Jim Erckmann complimented the people who worked on this program. All these merit wider publication including stream crossings and thinning programs.

Good of the order – Suggestions were offered for the June 2014 meeting, including visiting old growth forest, Rainbow Bend. Nancy Ahern thanked the entire HCP Oversight Committee for their dedication, expertise, careful attention to the program. She commented that is remarkable we've been at this for more than 10 years. She explained that SPU is currently

going through a strategic business plan process which has only a six-year time horizon, very short compared to the HCP's 50-year term. As part of SPU's Strategic Business Plan process we realized that we must be forward thinking stay ahead, "Solve problems at the source". The notion is much more meaningful when we're talking about our watersheds, and the importance of longevity.

Adjourn - The meeting was adjourned at 11:30.