**East Fork Lewis Work Group Notes**

**September 10, 2018**

1. **Fish Use**
   * Some Chinook spawning is occurring, but has declined significantly in recent years.
   * Steelhead are no longer spawning in the project reach.
   * Some juvenile salmon and steelhead have been observed in areas of localized groundwater (hyporheic flow) interception.
   * The work group members stressed that information on historic and current fish use and trends is needed to inform the design process.
2. **Channel Conditions**
   * It was noted considerable bank erosion continues in the Daybreak reach immediately above the project area and that a headcut now extends above the Daybreak Bridge.
   * Material from the erosion in the Daybreak Reach is being deposited in the project reach, particularly in the Ridgefield pits.
   * Upstream channel processes and sediment transport into the project reach should be considered in the design process.
   * It was reported that sediment deposition was affecting access to tributary streams in the project reach.
3. **Flows and Water Temperature**
   * The project reach experiences very low summer flows, in some years less than 50 cubic feet per second. The low flows and high width-to- depth ratio result in additional water temperature increase.
   * It was noted that the project reach experiences not only low summer flows but high winter flows and that flow have become flashier, rising and falling quickly over relative short periods.
   * Hyporheic flows (subsurface water flow through alluvial sediments) provide localized cool water inputs within the project reach channel and fill the Daybreak pits.
   * The design process should consider flow levels and water temperatures entering and within the project reach. The extent and nature of hyporheic flows and their potential to lower water temperatures in the project reach should also be considered.
   * The design process should consider the effect of Columbia River flow levels on sediment transport through the project reach.
4. **Mining**
   * The project reach has and continues to be affected by gravel mining.
   * The river has avulsed into the former Ridgefield pits.
   * Clark County has several small gravel pits that are located in the floodplain but no longer used.
   * The Storedahl Daybreak gravel mine continues to operate. The operation is conducted under a Habitat Conservation Plan (HCP) approved by the NOAA and USFWS.
   * The work group members would like to know more about the Storedahl mining operation and HCP and how they will fit in the planning process.
5. **Landowner Concerns**
   * While not in the project reach, Clark County is concerned over the continued bank erosion occurring at it Daybreak Park which is immediately above the project reach.
   * Private landowners have expressed concerns that erosion in the project reach threatens their homes.
   * Landowner concerns need to be more fully understood and considered in the design process.
6. **Land Ownership**
   * Ownership of the Ridgefield pits needs to be clarified. Originally purchased by Pac Rock (Pac Rock Environmental Foundation), the pits came under the ownership of Cemex upon its acquisition of Pac Rock. The site may have recently been transferred to a yet another owner.
   * A complete list of potentially affected landowners is needed.
7. **Restoration Approach**
   * The work group expressed the hope that the restoration design would be bold and ambitious.
   * It was suggested that a Stage 0 implementation approach be considered,
   * The planning process should consider:
     1. Fish usage (species and life history stages);
     2. Upstream conditions affecting the project reach;
     3. Channel dynamics within the project reach;
     4. Sediment transport;
     5. Flow (surface and hyporheic) and temperature;
     6. The East Fork Lewis TMDL;
     7. Landowner interests;
     8. The current Storedahl mine operation and its planned future state
     9. Public infrastructure; and
     10. Public recreational use of the river
   * Given the potential size and complexity of restoration efforts in the reach, consideration should be given to a multi-phase/multi-year implementation approach.
   * The work group was interested in case studies involving the restoration of gravel pits in river flood plains.
8. **Communications**
   * It was suggested that the Corps of Engineers and BPA be consulted in the planning process.
   * It was agreed that a web-based information sharing site would be useful in ensuring stakeholders are well informed and understand expectations.
   * Storedahl should continue to be invited to participate in the work group and keep advised of the planning process.
9. **Public Outreach**
   * Further outreach to potentially affected private landowners.
   * Broader public outreach should occur in the later phases of the planning process.