Swift Creek Sediment Management Action Plan

Sediment Repository
Conceptual Site
Screening Report

Whatcom County Council
Surface Water Work Session
February 14, 2017
Today’s Agenda

• Background
• Repository Site Screening Report
• Next steps
• Status of Oat Coles bridge
• Questions
Background

• Landslide on Sumas Mountain at Swift Creek
  – Contains asbestos and metals
  – Extremely low calcium-to-magnesium ratio
  – Landslide failure

• Sediment laden stream
  – 30,000 yds$^3$ to 123,000 yds$^3$ per year deposited
    • (GeoEngineers 1998; Converse et al 1976; KWL 2008)

• Large debris flow occurred in 1971
  – 150,000 yds$^3$ in 20 minutes
    • (BGC 2005)
Background

• Dozens of investigative reports and studies
• Culminated into the Environmental Impact Statement for the Swift Creek Sediment Management Action Plan (SCSMP)
• SCSMAP adopted by resolution 2013-026 on July 23, 2013
  – Capital Projects for the long term solution
  – Analysis to Re-route the North Fork
  – Site analysis for repository storage
Sediment Repository Conceptual Site Screening Report

• Conceptual layout of a repository
• Reviewed all the land in the area that could hold 1 million cubic yards (design goal)
• Eliminated parcels due to restrictions
  – Land use
    • Sensitive watersheds, Future development, Resource lands
  – Critical areas
    • Geo hazards, Flood plain, Aquifer recharge, Wetlands, Habitat
  – Transportation costs
Sediment Repository Conceptual Site Screening Report

• Recommendation
  – Two Sites adjacent to the creek
    • Lowland area at the base of the mountain
      – Figure 3-16a page 3-41
    • Area behind the debris flow levee
      – Figure 3-19 page 3-49
Next Steps

• Repository Storage Area
  – Supplemental EIS and permits for the two sites
  – Land acquisition

• Overall Management Action Plan
  – State capital budget *(HB 1075; SB 5086)*
    • $5.5 million for 2017-19
    • $11.8 million for re-appropriations 2019 +
Next Steps

If the State approves the capital line item:

– Supplemental Budget Request *perhaps June 2017*

  • $5.5 million (2017-2019)
    – Land Acquisition
    – Supplemental EIS for repository sites
    – Design and construction of Sediment Traps
    – Design and construction of Debris Flow Levee
    – Design of Sediment Basins
    – Dredging
    – Administration and Project Management

  • $11.8 million (2019+)
    – Construct Sediment Basins
    – Preliminary Repository Site development
    – Dredging
    – Administration and Project Management
Oat Coles bridge

• Bridge deck removed January 30, 2017
• Temporary bridge design underway
• Goal to have a temporary bridge by April
Questions?