1. Assumptions and uncertainties
2. Social and cultural history; modern social and cultural conditions, opportunities for adaptive governance.
3. Legal history; development of jurisdictional issues.
4. Modern legal trends—adaptive governance. FEMA lawsuit.
   1. Challenges to adaptive governance
      1. Multiple governments asserting jurisdiction.
         1. Uncertainty associated with land use jurisdiction between county and tribe
         2. Federal jurisdiction
            1. FEMA
         3. Missed monitoring opportunities.
         4. Missed collaboration opportunities.
         5. Implementation problems.
            1. Inaction because of inability to respond to changes
            2. For example, in Lapwai, when FEMA implements its floodplain management plan, which encourages development within a floodplain, local or tribal governments may recognize the problem but be powerless to change it.
   2. Opportunities for adaptive governance
      1. Shared knowledge
         1. More sophisticated adaptive management
      2. Increased opportunity for collaboration
      3. Multiple response scales
         1. Resilient management structures
            1. Resources allocated to multiple agencies.
5. Effects of decisions on hydrology—effect of FEMA development in floodplain.
6. Effects of decisions on Steelhead, needs of Steelhead.
   1. Short intro that ties in the previous sections (1 paragraph)
      1. How do those disciplines affect steelhead needs and presence?
         1. Historical reliance on/importance of steelhead in Native American culture
         2. Legal complexities of fish management (cross-jurisdictional)
         3. Water quality/quantity needs of steelhead
   2. What are the biological requirements (needs) of steelhead? (Bjornn and Reiser, 1991; Brian Kennedy’s lecture)
      1. Streamflow
      2. Temperature
      3. Habitat
         1. Floodplains
            1. Connectivity
            2. Areas of refuge
         2. LWD
         3. Pools
         4. Spawning ground
   3. How have steelhead been affected by land use changes in the watershed?
      1. Current status of steelhead in Lapwai Creek Watershed
         1. Hartson et al., 2010
      2. Effects of water withdrawal on instream conditions and migration
         1. Waples et al., 2009
            1. Pacific salmon in general
      3. What has been proposed to help them?
         1. Richardson and Rasumussen, 2007
            1. Nez Perce tribe’s strategy for ecological restoration
      4. Potential for adaptation/resilience
         1. Healey, 2009
            1. Resilient salmon in British Columbia
7. Solutions
   1. Addressing assumptions and uncertainties.