

APPENDIX B REACH SHEET DATA SOURCES

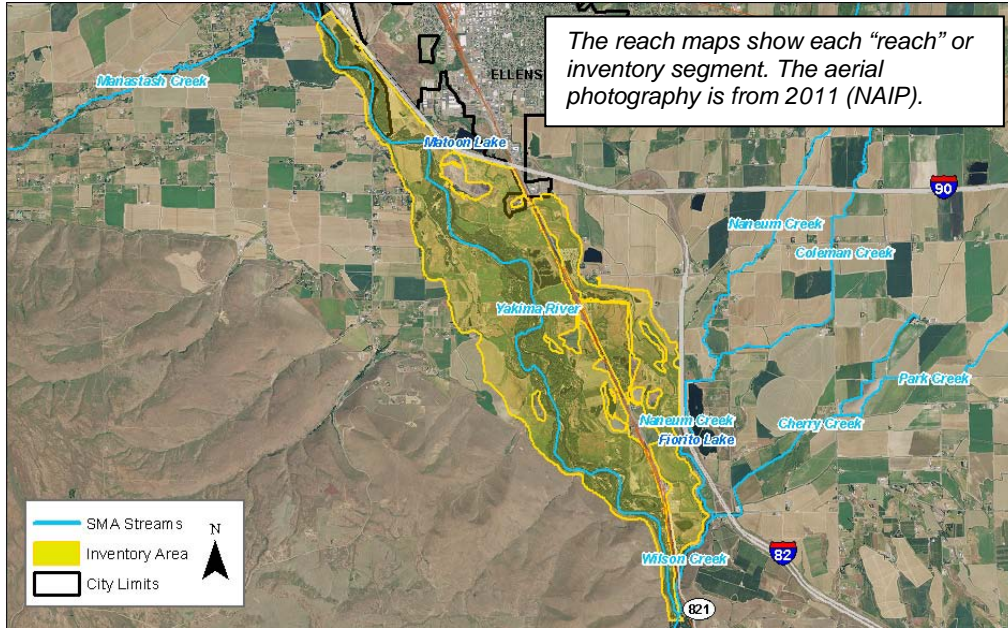
REACH SHEET EXPLANATION AND DATA SOURCES

SHORELINE LENGTH:

Shows the calculated length of the stream reach, or the lake perimeter within the shoreline inventory area.

REACH INVENTORY AREA:

Shows the total area of land and water subject to the inventory.



PHYSICAL AND ECOLOGICAL FEATURES

CHANNEL CONFIGURATION

Configuration of the stream channel or lake is described based primarily upon information available in Haring, 2001. If channel/lakeshore data was not available, configuration was described based upon air photo interpretation.

LAND COVER (MAP FOLIO #3)

This information describes the land cover types within the reach based upon remote sensing data (GAP Analysis-Level II Land Cover, 2009).

HAZARD AREAS (MAP FOLIO #2)

This dataset contains information about potentially hazardous areas, which include: landslide hazard areas, frequently flooded areas (i.e. the FEMA 100-year floodplain), and channel migration zones (Data sources: WDNR, 2010; FEMA; Ecology, 2012; ESA, 2013). These data show where hazards are likely to occur or where they are known to have occurred. Hazards may be present in areas where none are mapped.

HABITATS AND SPECIES (MAP FOLIO #1)

This describes the location of state-designated priority habitat and species, as reported by the WDFW Priority Habitats and Species Program. Priority habitat data are based upon field biologist observations, where available; not all species or habitat locations are represented in the data. The fish data is augmented by information collected from the TAC.

Information on the approximate location and extent of known wetlands and streams is based on data from USFWS and WDNR wetland and waterbody inventories. Wetland data are course-scale, and often do not depict small wetlands, slope wetlands, or wetlands in dense forest stands. A field investigation would be required to accurately determine the presence or absence of wetland habitat in a particular area.

PHYSICAL AND ECOLOGICAL FEATURES (CONTINUED)

WATER QUALITY

This dataset comes from the State of Washington's Water Quality assessment (WQA) and list of impaired waterbodies (2008). The State's WQA categorizes water quality into five categories, ranging from Category 1 waterbodies which meet federal clean water standards to Category 5 waterbodies that are polluted and put on the EPA's impaired waterbodies (303(d)) list. Only waterbodies that have an approved and implemented pollution control program [i.e., a Total Maximum Daily Load or TMDL (i.e., Category 4a and 5 waterbodies) are shown in the reach sheets.

BUILT ENVIRONMENT AND LAND USE

SHORELINE MODIFICATIONS (MAP FOLIO #1)

This dataset identifies locations of modifications to the shoreline environment, including docks, dams, stream crossings, fish passage barriers, streambank armoring. Data are from a variety of sources: WDFW, 2010; WDNR, 2009; CWU, 2009; and TAC, 2012.

PUBLIC ACCESS (MAP FOLIO #4)

These data identify locations where members of the public have access to shoreline streams and lakes (Data sources: WSP, 2012, Kittitas County, 2011 & 2012, BLM, 2010, TAC 2012). Some locally known, unpublished, or unofficial public access areas may be missing from the maps.

EXISTING LAND USES AND OWNERSHIP (MAP FOLIO #4)

These data describes the use and ownership (i.e., public and private) of lands immediately adjacent to shorelines based on available public records (Data source: Kittitas County, 2011).

CONTAMINATED SITES

This dataset contains the locations of regulated hazardous materials facilities, spill sites, and cleanup projects. The list of regulated facilities as well as past and on-going cleanup projects is maintained and updated by Ecology (2011).

ZONING (MAP FOLIO #5)

These data depict Kittitas County zoning categories of lands immediately adjacent to shorelines (2011).

CULTURAL AND ARCHAEOLOGICAL RESOURCES

This dataset contains recorded and prehistoric cultural and archaeological sites (Source: Washington State Department of Archaeology and Historic Preservation, 2010). Due to federal and state laws which preclude the release of site location information, only the number and type of cultural resource sites recorded within a reach are shown on the reach sheets.

SHORELINE FUNCTION ANALYSIS

This box presents an assessment of shoreline functions. The existing level of aquatic habitat quality, terrestrial habitat quality, vegetation functions, and hydrologic functions were assessed qualitatively into 3 categories (high, medium, and low functioning) based on the indicators described below. The function analyses represent an average of functional quality within the inventory reaches. For example, there may be high-functioning areas present within a reach that scored an overall low rating.

FISH HABITAT QUALITY

Indicators of high-quality fish habitat include:

- *Presence of fish spawning and rearing habitat*
- *Anadromous fish access*
- *Generally non-impaired water quality and adequate water flow regime*
- *Absence of shoreline modifications*
- *Presence of relatively undisturbed, natural riparian vegetation*

TERRESTRIAL HABITAT QUALITY

Indicators of high-quality terrestrial habitat include:

- *Presence of wetland habitat*
- *Presence of relatively undisturbed, natural vegetation*
- *Connectivity to large areas of undisturbed habitat*
- *Minimal existing land development*

SHORELINE FUNCTION ANALYSIS (CONTINUED)

VEGETATION FUNCTIONS

(e.g., water quality buffering, temperature maintenance, woody debris/organic matter inputs)

Indicator of high-quality vegetation functions includes:

- *Presence of dense, natural, and relatively undisturbed riparian forest and shrub*

HYDROLOGIC FUNCTIONS

(e.g., flood water storage, movement of water, hyporheic connectivity)

Indicators of quality hydrologic functions include:

- *Presence of undeveloped/unaltered floodplain*
- *Absence of shoreline hydromodifications*
- *Unaltered flow regime (e.g., minimal irrigation withdrawals/diversions)*

KEY MANAGEMENT ISSUES AND OPPORTUNITIES

This box describes key management issues and opportunities for the reach based upon an analysis of the data presented above, potential future land use changes, and a review of existing studies and other information conducted during the shoreline inventory and characterization. The box is limited to issues and opportunities that are reach-specific; waterbody and watershed-scale issues are presented in the text. A list of initial restoration opportunities within the reach is also presented.