

APPENDIX C  
SHORELINE CHARACTERIZATION,  
TOWN OF COULEE CITY

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## The Town of Coulee City Shoreline Master Program Update Shoreline Inventory, Analysis, and Characterization Report

### 1 SHORELINE INVENTORY

Appendix C contains the Inventory, Analysis, and Characterization results for the Town of Coulee City (Town). This section describes the land use patterns of the town, specifically detailing:

- Existing land use
- Planned land use based on the Town's 2006 updated Comprehensive Plan
- Preferred use for shoreline areas based on the Shoreline Management Act (SMA)
- Existing shoreline environment designations based on the Town's current Shoreline Master Program (SMP), if one exists

Section 2 summarizes the land-capacity analysis results.

Section 3 summarizes the characterization of each shoreline reach within Coulee City. The following reaches are included:

- Banks Lake

#### 1.1 Land Use Patterns

##### 1.1.1 Existing Land Use

The Town and Urban Growth Area (UGA) include about 47 acres of shoreline land. Almost all of the Town shoreline falls within the Coulee City Community Park. Most of the shoreline is owned by federal and state agencies with some private ownership. Public ownership includes the following:

- U.S. Bureau of Reclamation (USBR)
- U.S. Bureau of Land Management (BLM)
- Washington State Parks and Recreation Commission (State Parks)
- Washington State Department of Natural Resources (DNR)

Within the shoreline, the Coulee City Community Park's recreational uses include camp sites, boat rentals, launch and moorage, picnic sites, swimming beach, playground

equipment, walking trail, and restroom facilities. Additionally, vendors also operate in this park. The parkland is leased to the Town from the USBR.

### **1.1.2 Planned Land Use**

The Town's Comprehensive Plan (plan) was adopted in 2004 and edited in 2006. The plan outlines the Town's long-term goals and provides guidance for future development. Its vision is to maintain "a friendly, scenic, small community, committed to provide for the health, safety, and well-being of its citizens and guests through the wise management of its diverse resources." The plan's land use goal aims to protect the Town's natural environment, and protect fish and wildlife habitat as important natural resources. The plan's economic development policy promotes growth for "tourism-related businesses and services, particularly for recreational-type uses that capitalize on the natural amenities of the area."

The plan provides overall direction and guidelines for future commercial, tourism commercial, industrial, and residential lands as well as provides general location, distribution, and intensity of various land use types.

In most cases, the Town's existing land uses are consistent with future land use. The land use types within the Town's limits and UGA shoreline are commercial, tourist commercial, industrial, multi-family, and single-family. Only commercial/tourist commercial land use is present in within the shoreline, which includes the Coulee City Community Park. Areas within the UGA would maintain the County's planned land use purposes (Appendix C) until annexed to the Town.

## **1.2 SMA Use Preference**

The SMA identifies water-oriented uses for shoreline as (173-26-020 WAC), "water-oriented use means a use that is water-dependent, water-related, or water-enjoyment, or a combination of such uses." The SMA guidelines also require that non water-oriented uses be limited to areas where preferred uses are not appropriate or these uses contribute to the goals of the SMA [WAC 173-26-201(2)(d)].

Preferred uses for shoreline areas are listed in WAC 173-26-201(2)(d). The order of preference assigned to these uses is as follows:

- Protection and restoration of ecological function
- Water-dependent uses
- Water-related uses
- Other compatible water enjoyment uses
- Single-family residences

Most of the recreational uses within the Coulee City Community Park meet the definitions of water-oriented uses.

### **1.3 Existing Shoreline Environment Designations**

The Town does not have an existing SMP document.

## 2 LAND-CAPACITY ANALYSIS RESULTS

Almost the entire shoreline in Coulee City is within the Coulee City Community Park. Although the land use designation indicates commercial/tourist commercial for this area, the Town's objective is to maintain the park use under a lease agreement from USBR. The park is used for recreational purposes and potential for non-recreational development in this shoreline is very limited.

**Table 1**  
**Estimated Residential Land Capacity Summary**

<b>Reach</b>	<b>Net Developable Acre</b>	<b>Total Capacity in Residential Units</b>
Banks Lake	0	0

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### 3 REACH CHARACTERIZATION TABLE

This section summarizes the characterization of Banks Lake within the Town of Coulee City. The elements described include:

- Existing/physical descriptions
  - Reach location description
  - Reach length
  - Shoreline jurisdiction area
  - Ownership
  - Existing land cover
  - Geomorphic character
  - Flooding and geologic hazards
  - Land use and current SMP designations
  - Habitat types and presence of priority species and habitats
  - Existing public access
  - Vegetation characteristics
  - Major infrastructure
  - Water quality concerns
- Reach characterization and analysis
  - Water quantity
  - Water quality
  - Habitat
- Preliminary reach goals and environment designations
  - Protection goals
  - Restoration goals
  - Public access goals
- Identified development plans
  - Identified restoration measures
  - Identified public access improvements
  - Cumulative impact considerations

BANKS LAKE		TOWN OF COULEE CITY
Banks Lake, 26,480 acres	Shoreline Jurisdiction: 47 acres	
		
<p><b>Description:</b> The area of the Coulee City along the Southeast edge of Banks Lake, at the east end of Dry Falls dam.</p>		
<p><b>Subreaches (SR), see Figure 1:</b>  SR A: Begins at the west side of town extending approximately 2,700 feet east  SR B: Extends northeast approximately 3,800 feet</p>		
<p><b>PHYSICAL CHARACTERISTICS</b></p>		
<p><b>Ownership:</b> Primarily federal (USBR)</p>		
<p><b>Existing Land Cover/Development:</b> The primary land use of the shorelands is recreational, including trails and a campsite/RV park.</p>		
<p><b>Land Use/Current SMP:</b>  Land use designation:</p> <ul style="list-style-type: none"> <li>• Incorporated: Tourist commercial, 46 acres; right of way, 1.1 acres</li> <li>• UGA: 0 acres</li> </ul> <p>Current SMP environment designation: Not applicable</p>		
<p><b>Major Infrastructure:</b> Coulee City Campground (campground, two fishing spits, and public boat launch), marina and breakwater, Community Park, roads, paths, and public access area. Columbia Basin Project irrigation system intake just west of City.</p>		

BANKS LAKE	TOWN OF COULEE CITY
<p><b>Geomorphic Character:</b> Banks Lake is a reservoir impounded by the Dry Falls Dam at the southwest end of the lake. The pool elevation is regulated by the dam and fluctuates seasonally.</p> <p>Hardened banks: Breakwaters and riprap in spit area. Total estimated hardened shoreline distance is approximately 2,300 feet.</p>	
<p><b>Flooding and Geological Hazards:</b> The pool level is regulated by the dam and not at risk of flooding.</p> <p>Shoreland soils are categorized as moderate and severe susceptibility to erosion.</p>	
REACH CHARACTERIZATION AND ANALYSIS	
<p><b>Water Quantity and Sediment:</b> The water level in Banks Lake fluctuates seasonally with dam operations related to the Columbia Basin Project.</p>	
<p><b>Water Quality:</b> There are 303d listings, including PCB and TCDD.</p>	
<p><b>Habitat Characteristics and PHS Species Presence:</b></p> <p>Vegetation within Subreach A is limited to lawn, shrub, and ornamental tree species, including Russian olive (<i>Elaeagnus angustifolia</i>); very little riparian buffer exists besides a few solitary trees. Adjacent uplands have been developed for recreation or residential properties with large amounts of impervious area. A sizeable riparian buffer exists within Subreach B, with many areas reaching at least a 100-foot-wide buffer. A freshwater emergent wetland with associated shrub and groundcover species is also supported in this subreach. Upland areas support a relatively large patch of shrub steppe habitat.</p>	
ECOLOGICAL FUNCTIONS ANALYSIS (BY SUBREACH)	
SUBREACH A	
<p><b>Level of Existing Function:</b> Impaired</p> <p><b>Stressors:</b> Rock armoring and impervious surfaces associated with recreational development; Highway 2 near shoreline; invasive species within drainage just south of highway</p> <p><b>Potential Stressors:</b> Sustained and potentially increased recreation development and use</p> <p><b>Potential Restoration Opportunities:</b> Evaluate opportunities for soft shoreline/riparian stabilization techniques. If public access is redeveloped, consider opportunities to increase aquatic habitat complexity (substrate, organic material, structural elements [e.g., large woody debris], and aquatic and riparian vegetation).</p> <p><b>Potential Protection Opportunities:</b> Stormwater controls consistent with Eastern Washington Stormwater manual.</p>	
SUBREACH B	
<p><b>Level of Existing Function:</b> Functioning</p> <p><b>Stressors:</b> Dirt access road/trail behind riparian buffer, small foot paths within shrub steppe habitat, small boat ramp at northern extent of subreach</p> <p><b>Potential Restoration Opportunities:</b> If boat ramp is redeveloped, consider opportunities to increase aquatic habitat complexity (substrate, organic material, structural elements [e.g., large woody debris], and aquatic</p>	

BANKS LAKE	TOWN OF COULEE CITY
<p>and riparian vegetation).</p> <p><b>Potential Protection Opportunities:</b> BMPs to protect from further degradation; evaluate measures to limit recreation impacts on shrub-steppe habitat</p>	
<p><b>Preliminary Shoreline Environment Designation Considerations:</b> Urban conservancy</p>	
PUBLIC ACCESS	
<p><b>Existing Public Access:</b> The entire shoreline in this management area falls within the Coulee City Community Park. The parkland is leased to the City from the Bureau of Reclamation. The park is heavily used for recreational purposes. It includes multiple public access and recreational facilities such as campgrounds, RV site, day use areas, fishing areas, walking trails, bird watching, beach swimming area, and boat launching with moorage. It also provides necessary parking, restroom and park equipments. Specific facilities in this management area include:</p> <ul style="list-style-type: none"> <li>• Boat ramp – improved – 1</li> <li>• Boat ramp – unimproved – 1</li> <li>• Campground – 1</li> <li>• Dock – 5</li> </ul>	
<p><b>Existing Public Access Goals:</b> The Town of Coulee City's Park Plan 2006 establishes goals for the Coulee City Community Park. All of the goals focus on public access opportunities as follows:</p> <ul style="list-style-type: none"> <li>• Improve operations and functionality of the park</li> <li>• Increase park attendance</li> <li>• Meet current needs</li> </ul> <p>The USBR's Banks Lake Resource Management Plan (USBR 2001) indicates multiple recreational resource management goals as follows:</p> <ul style="list-style-type: none"> <li>• Provide a diverse range of recreation opportunities and services consistent with public use trends</li> <li>• Protect and enhance recreational importance and visitor experience</li> <li>• Ensure compatibility between motor vehicle traffic and natural/cultural resource protection, land use compatibility/suitability conflicts, and public safety concerns.</li> <li>• Limit or eliminate motorized travel or recreation activity on soils sensitive to compaction, have a high soil erosion potential rating, and/or exhibit existing accelerated erosion problems (USBR 2001).</li> </ul>	

BANKS LAKE	TOWN OF COULEE CITY
<p><b>Identified Public Access Improvements:</b> According to the Park Plan 2006 for the Town of Coulee City, all of the existing amenities are scheduled to be repaired in the short and long terms. In addition to the maintenance of ongoing facilities, improvements identified in this plan include:</p> <ul style="list-style-type: none"> <li>• Infrastructure improvement such as roads, parking, irrigation system, and screening of trash receptacles</li> <li>• Boat launch improvement</li> <li>• Addition of moorage, fueling station, fishing platform, and cleaning station</li> <li>• Current campground improvement</li> <li>• Modernizing RV hookups</li> <li>• Creating group camping site</li> </ul> <p>With the proposed improvements, this area will have adequate public access opportunities.</p>	
CUMULATIVE IMPACT CONSIDERATIONS	
<p><b>Cumulative Impact Considerations:</b></p> <p>Watershed level: The SMP has limited influence on the Columbia Basin Project operations.</p> <p>Reach level:</p> <ul style="list-style-type: none"> <li>• Impervious surfaces leading to habitat loss and run-off rather than infiltration</li> <li>• Vegetation alterations removing organic material</li> <li>• Chemical contaminant increases from future recreation infrastructure</li> <li>• Shoreline hardening/stabilization through breakwater at Community Park</li> <li>• Structural effects on habitat including fragmentation by roads and overwater structures</li> </ul>	

#### **4 REFERENCES**

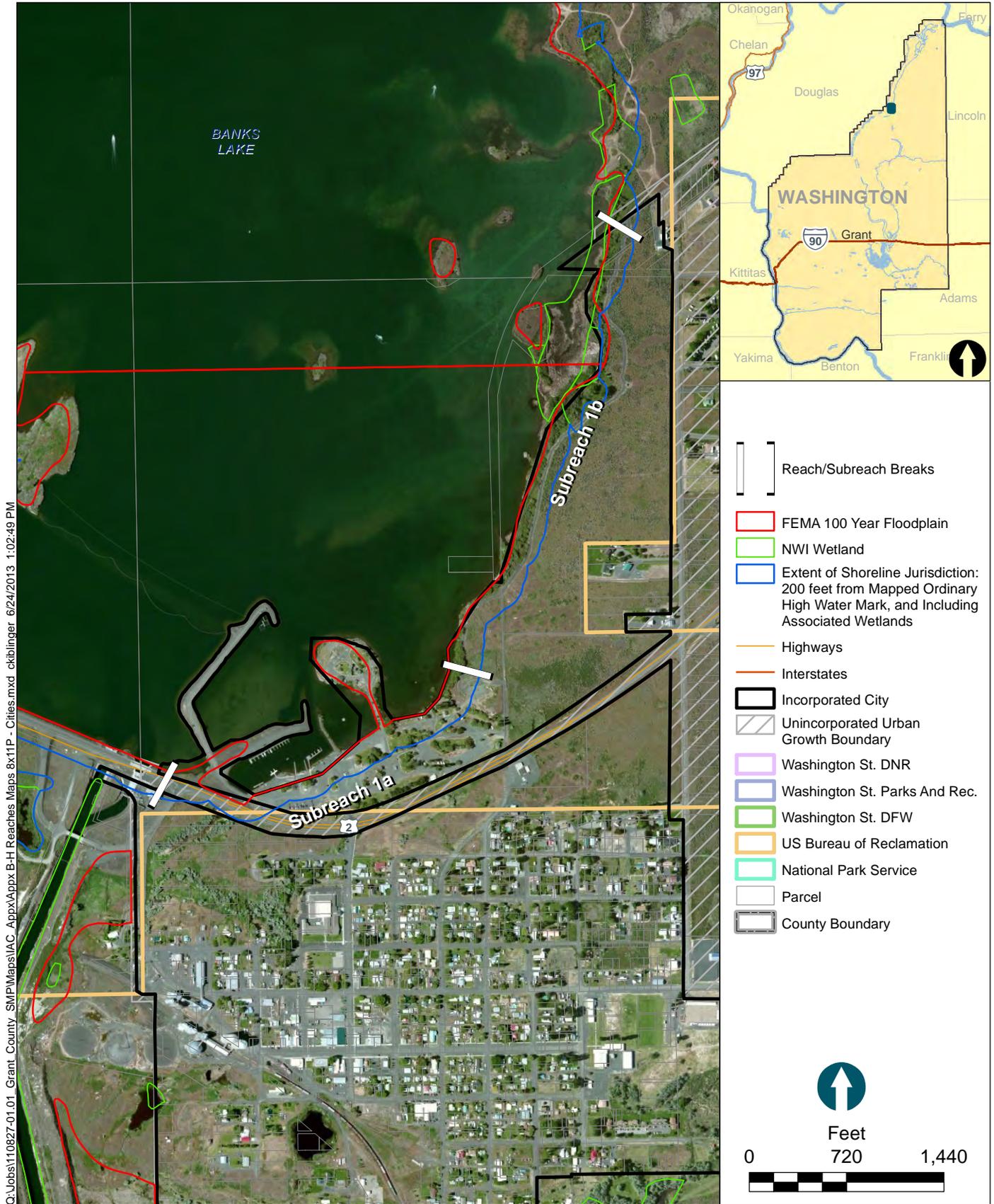
Coulee City (Town of Coulee City), 2006. *Coulee City Park Plan*.

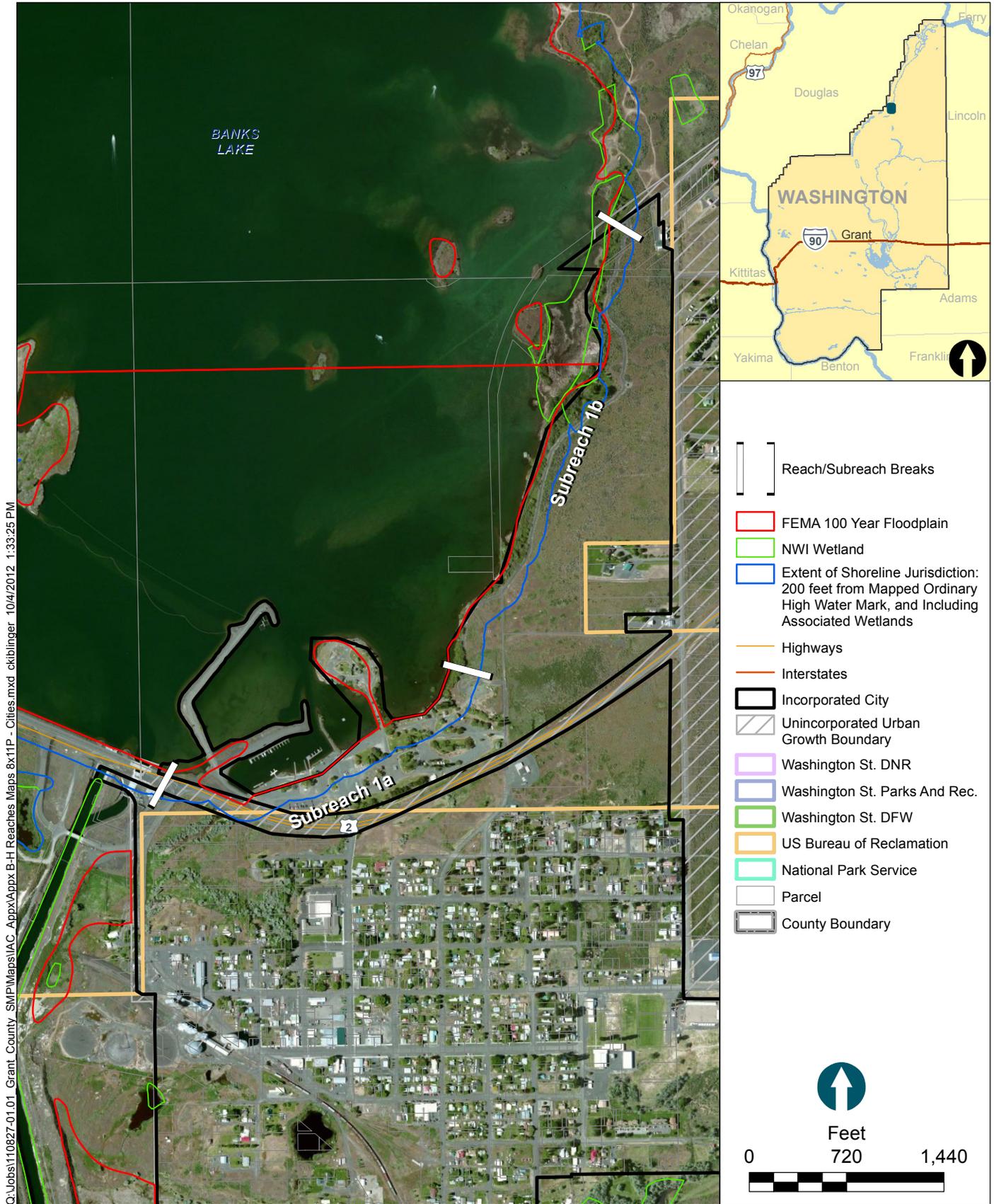
Coulee City, 2006. *Coulee City Comprehensive Plan*.

USBR (U.S. Bureau of Reclamation), 2001. *Banks Lake Resource Management Plan*. Grant County, Washington. July 2001.

# FIGURES

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**Appendix C, Figure 1**  
 Banks Lake - Coulee City  
 Shoreline Inventory, Analysis and Characterization Report  
 Grant County Shoreline Master Program Update