## **Appendix A: Recommended Policies**

**Goal 1**: Achieve removal of properties from the 100-year flood zone through methods and improvements recommended in this Plan.

**Goal 2**: Obtain Federal Emergency Management Agency flood map revisions once the flood reduction components of the Plan are completed.

**Objective 1**: To Increase floodway capacity and stormwater attenuation

**Objective 2**: To provide main channel re-routes along Yreka Creek at selected locations to increase channel meanders where the existing channel is too straight, and where enough stream corridor width is available to accommodate re-routes. The re-routed channels should correspond to stable channel geometry determined by the geomorphology study.

Action Item 1: Install bypasses and offset levees to reduce potential flooding.

<u>Action Item 2</u>: Lower the adjacent land on one or both sides of the channel to create a wider and more easily-accessible floodplain near the level of the down-cut stream and result in a lower flood height and extent, and potential containment of large floods entirely within the new floodway.

Action Item 3: Use localized bank armoring where necessary.

<u>Action Item 4</u>: Utilize the material generated by excavation to construct adjacent building pads that further elevate future development above the 100-year flood zone.

<u>Action Item 5</u>: Retrofit existing bridges and other road crossings over streams to increase flood passage and facilitate trail locations in close proximity to the creek wherever possible.

<u>Action Item 6</u>: Remove and replace existing crossings, install additional crossings next to existing crossings, or permanently remove existing crossings where they are no longer needed. Types of new and added crossings may include clear-span bridges, multi-span bridges, arch culverts, and box culverts.

Action Item 7: Utilize large and small retention basins.

<u>Action Item 8</u>: Retrofit the existing spillway at Greenhorn Dam to more easily facilitate reservoir lowering between storm events and facilitate future fish passage.

<u>Action Item 9</u>: Install a large bypass culvert on Little Humbug Creek, upstream from dense development, to intercept large flows and divert them to Yreka Creek.

<u>Action Item 10</u>: Install a low retaining wall on the north and east sides of Greenhorn Creek channel above the inlets to box culverts under Main Street and Interstate 5 to prevent spilling of high flows onto Main Street.

<u>Action Item 11</u>: Augment the existing sound berm on the east side of Interstate 5 just north of the Yreka Creek Bridge to function as a small offset levee to prevent spilling of high flows northward to Foothill Drive.

<u>Action Item 12</u>: At the Waiiaka mobile home and RV park along Sharps Road, implement a modest augmentation of existing low offset levees around the facility to provide further protection from flooding.

**Goal 3**: Implement improvements to help meet stricter water quality regulations and to reduce the size and scope of water quality improvements needed.

Goal 4: Provide a tool to assist the community in seeking grants to achieve Greenway improvements.

**Objective 3**: To provide an updated Greenway Master Plan to serve as the basis for a comprehensive watershed plan to comply with Total Maximum Daily Load (TMDL) requirements for sediment and dissolved oxygen under the Clean Water Act that were implemented to protect Coho salmon in the Shasta River and tributaries.

**Objective 4**: To provide a storm drainage system that will allow smaller storm events to stay above ground and allow large events to flow into the underground storm drainage system. This design will achieve MS4 goals because most urban runoff pollutants come from smaller storm events (most notably "first flush" events following long periods of dry weather).

**Objective 5**: To provide a programmatic EIR prepared for the entire Greenway Master Plan Update in order to streamline the CEQA process for future project-by-project implementation of the Master Plan.

<u>Action Item 13</u>: Keep runoff from smaller storm events at the ground surface where it can move more slowly through bioswales, small retention basins, and natural ephemeral drainages before entering Yreka Creek.

<u>Action Item 14</u>: As a means of intercepting and naturally processing stormwater runoff from buildings, parking lots, large lawn areas, equipment and storage areas, and other impervious or compacted surfaces, bioswales with small retention basins, such as those recently installed at Evergreen School, are to be implemented for existing parks, schools, churches, public facilities, and commercial and industrial properties within the City of Yreka, where there is room and as opportunities allow.

<u>Action Item 15</u>: When using restoration techniques that involve lowering and widening of areas to create readily accessible floodplains, including overflow and side channels, some of the standard Best Management Practices (BMPs) required in SWPPPs, such as silt fencing and straw rolls, are not necessarily compatible with the design approach. For these reasons, monitoring requirements associated with SWPPP implementation up to the time that the project is deemed completed should not include floodplain restoration, and one way to achieve this would be for North Coast Regional Water Quality Control Board to treat Yreka Creek Greenway projects as Risk Level 1.

<u>Action Item 16</u>: The use of ponds is recommended at the sanitary wastewater facility, along Upper Greenhorn Creek, and possibly at one or more of the public school campuses for learning opportunities. These ponds should be designed to be naturally-appearing and ecologically functional freshwater marshes, with a mix of open water, emergent aquatic vegetation (cattails, tules), nesting islands, and haul-out logs and boulders for turtles.

Goal 5: Achieve protection of natural resources within the Greenway Master Plan Area.

*Objective 6*: To promote the protection of natural resources in the Greenway Master Plan area.

<u>Action Item 17</u>: Retrofit the spillway at Greenhorn Dam to be usable as a spillway-wide fish ladder. At the top where there is a 6-foot headwall, an extension could be installed through an adjacent retaining wall and into the reservoir, not only completing the fish ladder but also providing a lake-level control structure to keep the reservoir low during the wet season for improved stormwater attenuation.

<u>Action Item 18</u>: Use materials removed from the sediment basin at the head of the Greenhorn Reservoir and tailings removed along Yreka Creek as spawning gravel at selected locations below the Dam. The sediment and tailings shall be processed off-site in order to provide clean spawning gravel.

<u>Action Item 19</u>: Install instream structures such as rock vanes, large woody debris, beaver dam analogues, and individual boulders and logs along existing and re-routed stream segments where fish habitat will be enhanced.

<u>Action Item 20</u>: Install streambank structures such as rootwads, engineered log jams, transplanted masses of vegetation, and boulders, most notably along the outsides of bends, along existing and constructed stream segments where appropriate. It is important to note that great care needs to be taken to design instream and streambank structures in such a way that they are not likely to wash downstream and cause damage or impair flows at bridges or culverts.

<u>Action Item 21</u>: Design stream channel and floodplain restoration to facilitate the expansion of beaver habitat where feasible.

<u>Action Item 22</u>: Continue screen wrapping of large trees to discourage the destruction of the trees by beavers until such time that there a sufficient number of large trees to accommodate the occasional loss by beavers.

<u>Action Item 23</u>: Include wet meadows around ponds, in several large open areas along Upper Greenhorn Creek, and in the bottoms of attenuation basins and bioswales in Greenway design where feasible. Plant species found in existing wet meadows and along existing streams in the City shall be used in constructed wet meadows.

<u>Action Item 24</u>: Natural detention/retention features such as snags and logs shall be used where they do not pose a threat to bridges and culverts, when feasible.

<u>Action Item 25</u>: Retain existing native and non-native large trees in their existing locations during restoration projects to retain stream shading and viable bird habitat. Where such trees are above desired final grade in excavation areas, the trees shall be retained in-place and left on a raised gently-sloping mound that corresponds to the root crown of the trees.

<u>Action Item 26</u>: Native riparian vegetation shall be used for all restoration projects adjacent to the creeks and streams of the Greenway Master Plan area. A list of native plant species is provided in Appendix F of the Greenway Master Plan.

<u>Action Item 27</u>: Native upland vegetation shall be used for all newly-constructed floodplain banks adjacent to new riparian areas. A list of native plant species is provided in Appendix F of the Greenway Master Plan.

<u>Action Item 28</u>: Bioswales and ephemeral (seasonal) drainages shall be vegetated with native plant species in natural assemblages that provide functional wildlife habitat (mainly food and cover). These species can be selected to retain sight distance (for safety reasons), maximize aesthetics, and minimize maintenance. Use natural-looking boulders and logs, and an initial ground cover of a native seed mix followed by some form of top dressing such as mulch or wood chips. Discourage and limit the use of decorative bark or gravel/cobble over weed barriers to avoid migration of loose bark, a sterile appearance, and impeded water infiltration.

**Goal 6**: Achieve completion of a conceptual design of the entire Greenway network.

**Goal 7**: Consider aesthetics of design and materials in development of the Greenway.

**Objective 7**: To implement an overall design approach for trails and other recreational facilities, primarily along Yreka and Greenhorn Creeks, with connections to business and residential areas, places of work, schools, and parks and other public areas.

**Objective 8**: To understand that there are portions of the proposed Greenway network that are not appropriate for public access, most notably ephemeral drainages that pass through small residential lots.

**Objective 9**: To provide some form of public access every half-mile along Greenway routes having trails.

<u>Action Item 29</u>: The selection of various materials to be used for Greenway facilities shall adhere to a rustic theme comprised of stone, rusting steel, and rough-sawn lumber.

<u>Action Item 30</u>: Where appropriate, the use of trailhead shared parking in existing parking facilities shall be encouraged. Where sharing is proposed on non-City-owned lands, use of those facilities will need to be negotiated with the landowners.

<u>Action Item 31</u>: Primary trailheads shall be paved and ADA-compliant and shall have at least 10 parking spaces. Secondary trailheads may be unpaved (compacted base material only), provide at least 5 parking spaces, and according to ADA guidelines they need not be ADA compliant since primary and most shared trailheads provide compliance.

Action Item 32: Trailhead signs shall be used to identify points of public access.

Action Item 33: Dog litter bag stations shall be included at points of public access.

<u>Action Item 34</u>: Trailhead signboards shall be compatible with the example shown in Figure 23 of the Greenway Master Plan.

<u>Action Item 35</u>: Trailhead site furnishings shall be compatible with those identified in Section 3.4.3 of the Greenway Master Plan.

<u>Action Item 36</u>: Bridges, boardwalks and wet crossings shall be compatible with those identified in Section 3.4.5 of the Greenway Master Plan.

<u>Action Item 37</u>: Signs and interpretive panels shall be compatible with those identified in Section 3.4.7 of the Greenway Master Plan.

<u>Action Item 38</u>: Fencing, railings and other barriers shall be compatible with those identified in Section 3.4.9 of the Greenway Master Plan.

<u>Action Item 39</u>: The use of sound walls, earthen berms, and other constructed barriers is encouraged along Interstate 5 to reduce vehicle noise within the Greenway area.

Action Item 40: Unauthorized motorized vehicles shall not be allowed within the Greenway.

<u>Action Item 41</u>: Install surveillance cameras at key locations along the Greenway where feasible and when funding for installation and operation allows.