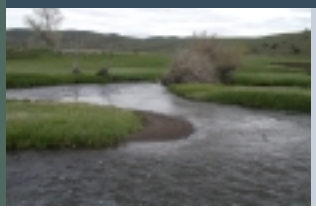
Chapter 4

Upper Sevier Watershed Management Plan



Watershed Description, Key Issue Descriptions and Issue Rankings

Watershed Descriptions, Issue Rankings and Key Issues

This Chapter contains the assessment portion of the Upper Sevier Watershed Management Plan, as well as more detailed maps and information for the 9 Upper Sevier Watersheds.

All 9 watersheds and associated information are organized as follows:

General Watershed Information

A short narrative for each watershed is included as an introduction to each of the 9 individual watershed assessments. Information such as land ownership, vegetation types and roads and trails is provided to help provide real spatial context for the watershed, as well as provide an extremely useful reference during pre-planning for site-specific projects. In addition, unique features and other interesting watershed information is described to help better understand a "sense of place."

Vegetation Types

Vegetation Narratives and tables include acreage and location of different vegetation types within each watershed. Vegetation types classified include aspen, grass/forb, mixed conifer, ponderosa pine, sagebrush/grass, and spruce/fir. Acreages for rock and water were lumped under a single "other" category. As a reference tool, vegetation types for each watershed and subwatershed are included in a single table, in Appendix F.

Land Ownership

Narratives, graphs, tables and maps for each of the watersheds contain information about National Park Service Lands, Bureau of Land Management Lands, State Lands, U.S. Forest Service lands and private lands. Large bodies of water were calculated as part of the State Land acres. As

--From the journal of Orville C. Pratt, camped on the Sevier River, near present day Salina:

September 26, 27, 1848

...The valley of the Sevier, where we struck it, is the finest I have seen since leaving the United States. ...Grass was so good and the water of the finest kind I ever saw. This valley of the Sevier is truly the loveliest spot, all things considered, my eyes ever looked upon. Some day or other, and that not distant, it will swarm with hundreds of our enterprising countrymen, as in truth it is, the garden of the great basin of the California Mountains.

****excerpt from: Keetch, M.R. 1967. Sevier River Basin Floods. Soil Conservation Service, Economic Research Service, U.S. Forest Service.*

a reference tool, land ownership information for all watersheds as well as subwatersheds is contained in Appendix G.

Elevation Roads and Streams

Elevation, road and stream information contained for each watershed is very general in nature. Only major streams and access routes are shown in map form. Map shading helps provide a general context for land elevation. This information provides a spacial context for the watershed, as it relates to better-known geographic areas, such as towns and major travel routes. Short narratives are included where special features and/or places of interest further define context for the watershed.

Key Issue Descriptions

As part of ranking resource issues for this watershed assessment, each TAC committee was asked to "elevate" 1 or 2 issues, and provide more detailed information, such as 1) Current Conditions, Patterns and Trends, 2) Reference Conditions, Patterns and Trends, and 3) Natural/Human Causes of Change Between Current/Reference Conditions. This information was typically captured for the two highest priority issues (as determined by H, M, L, rankings within that particular watershed and TAC). However, in some instances, a single resource issue that may be isolated to a small subwatershed area, and therefore not rank as a top priority within the watershed, was elevated simply because of the importance and immediate restoration need associated with that particular resource problem.

In some instances, TAC's only elevated one issue, or no issue at all. In another instance, equal importance values were placed on three resource problems within a TAC, and all three issues were elevated. Ideally, 12 key issues would be captured for each TAC; however, the number of issues for each watershed tended to vary from 10 resource issues identified, to 13 resource issues identified.

It is important to recognize that just because a resource issue was not elevated, does not mean that it isn't a high priority as a resource opportunity. A watershed TAC may have many resource issues that are considered priority; however, to provide an initial place to begin, and to see where issues overlap, the elevating of 1 or 2 priority issues, provided geographic regions in which restoration could be focused.

Current Conditions, Patterns, and Trends

Narratives regarding the current conditions, patterns and trends associated with an identified resource issue are based on resource specialist input, local knowledge and available past and present photographs and data. By structuring this information from a multitude of sources, "buy in" is obtained from local publics and individuals who reside within and utilize the economic resources within the watershed. In contrast, specialist input helped to elevate those issues of importance from a resource management agency perspective and other special interest groups.

Reference Conditions Patterns and Trends

The white paper, "Assessment of Major Vegetation Types Proper Functioning Condition (PFC)/ Desired Functioning Condition (DFC) for the Upper Sevier River Watershed, Private Lands, Bureau of Land Management, Dixie National Forest, Cedar Breaks National Monument, Bryce Canyon National Park, and State of Utah Lands (USDAFS, 2000)", provided the context for reference conditions, patterns and trends in this document. Other information regarding past watershed wildlife and plant species composition was obtained through other local sources, and are cited as referenced. Reference conditions, patterns and trends help understand previous watershed conditions, in comparison to current watershed conditions. While in most instances the Desired Future Condition (DFC) more closely resembles the Proper Functioning Condition (PFC), it does not always imply that conditions are worse today, than perhaps 50 to 100 years ago, and in some instances, conditions today, may be improved over those conditions at the turn of the Century.

Natural/Human Causes of Change Between Current/Reference Conditions

Local knowledge, as well as prior assessments (see above) help explain the change in conditions from what exists today within the watershed compared to what existed in the past within the watershed. This information tended to vary depending on the perspective of local partners and agency partners, lending further credence to the collaborative effort of this watershed management plan.

Key Issue Overlaps

Although each TAC group addressed its own set of issues, many key issues identified were similar and/or could be attributed to similar activities. Where appropriate, these issues have been combined into a single narrative. (For example, Pinyon/juniper and sagebrush/grasslands was addressed as a key issue by the hydrology, fire and vegetation TAC committees as a key issue for the Bear Creek Watershed and are combined into a single narrative). A summary of key issues identified for the entire Upper Sevier Basin can be found in the Executive Summary (Table E-1).

Key Issue Maps

Digital Orthoquad Maps (DOQ) were provided to each TAC committee to provide a schematic representation of the key issues chosen. Many of the issues from all of the TACs tended to be concentrated in similar areas. However, all key issues are identified separately in the map format. An overlap in a large number of issues may be a signal of the importance of that key issue for immediate restoration needs.

Note: These maps are not intended to be used in place of a site-specific analysis, or as an exact boundary where restoration projects should occur. They are simply included as a visual representation to provide a broader picture of overall conditions within the watershed, relationship of key issues to each other, and/or high priority areas where ecological and social conditions may overlap. This information should be used as a guide in developing on-the-ground, site-specific projects and enhancement opportunities.

Issue Ratings (H, M, L, NA ratings for all 63 issues identified for each Upper Sevier River Watershed)

The last section of each watershed narrative contains tables showing the exact priority ratings assigned to subwatersheds by technical advisory committees. Those issues identified by each TAC as a key issue are highlighted. The availability of resource issue ratings for the entire Upper Sevier Basin, based on collaborative input is a valuable leveraging tool to obtain partnership, agency and matching project funding. Again, an issue may be ranked as a high priority issue, and not ranked as a key issue, but still be a high priority for restoration as recognized by individual partners. The opportunity to leverage partnership support and restoration dollars may vary depending on state, local and federal interests.

Information contained in Chapter 4 is organized by watershed, beginning with the Upper Sevier River Main Stem, (Asay Creek, Mammoth Creek, etc.) followed by the Upper Sevier River East Fork (Upper East Fork, Middle East Fork and Lower East Fork).

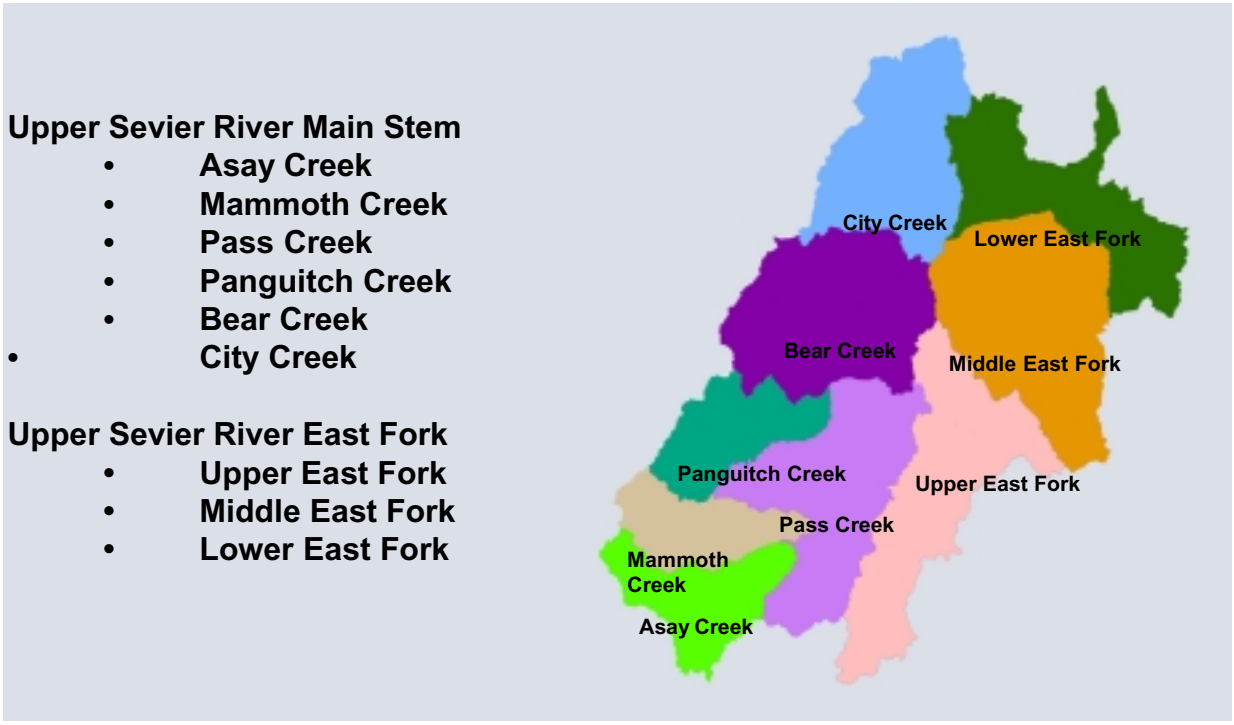


Fig 4-1. Key Resource issues identified for the Upper Sevier Watershed vary based on different uses, land ownership, elevation, accessibility and vegetation types within each watershed and subwatershed. The key issues addressed in this chapter, as well as the additional issue category ratings, represent input from hydrology, vegetation, species and habitat, agriculture, fire and human uses technical advisory committees (TAC's).