

Table S1. Stressors and Indicators compiled from existing datasets and used to evaluate NRV status of KECs in the Dixie and Fishlake National Forests. Data types can be considered stressors, indicators, or both. Our assessments integrate several indicators from these existing datasets to estimate ecological integrity of riparian and groundwater-dependent ecosystems.

Stressor/Indicator Data	Source(s)
Total length of stream segments with year-round surface flows	National Hydrography Dataset
Total length of stream segments with seasonal surface flows and accessible groundwater	National Hydrography Dataset
Number of springs per acre, as mapped in the Dixie National Forest geodatabase	Dixie National Forest Geodatabase
Road miles per acre of geographic unit	US Forest Service Terrestrial Condition Assessment
Percentage of roads that are unpaved and non-graveled	US Forest Service Terrestrial Condition Assessment
Recreation trail miles per acre	US Forest Service National Dataset
Road miles per 50-year floodplain acre	US Forest Service Terrestrial Condition Assessment, 50-year Floodplain Map
Trail miles per 50-year floodplain acre	US Forest Service National Dataset, 50-year Floodplain Map
Number of recreation sites per 50-year floodplain acre	US Forest Service National Dataset, 50-year Floodplain Map
Number of water diversion points per acre	Utah Division of Water Rights Database US Forest Service Water Rights and Uses Database
Number of diversion or retention dams per acre	Utah Division of Water Rights Database US Forest Service Water Rights and Uses Database
Percentage of the area overlapping range management units (grazing leases)	US Forest Service National Dataset
Percentage of the area overlapping actively grazed range management units	US Forest Service National Dataset
Percentage of the area with timber harvest	US Forest Service National Dataset
Percentage of the area with timber harvest using clearcut methods	US Forest Service National Dataset

Percentage of the area burned by high severity wildfires between 1984 and 2014	US Forest Service Terrestrial Condition Assessment
Percent change in winter temperature	US Forest Service Terrestrial Condition Assessment
Percent change in winter precipitation	US Forest Service Terrestrial Condition Assessment
Percentage of 50-year floodplain with high or very high wildfire hazard potential	US Forest Service Terrestrial Condition Assessment
Percentage of 50-year floodplain experiencing moderate to high severity wildfire between 1984 and 2014	US Forest Service Terrestrial Condition Assessment
Mean proportion of confiner encroachment occurring along stream reaches	Riparian Condition Assessment Toolbox
Mean proportion of upland vegetation encroachment occurring along stream reaches	Riparian Condition Assessment Toolbox
Water Quantity Condition - Indicator of whether stream hydrographs have no or minor, moderate, or significant departure from natural conditions	US Forest Service Watershed Condition Classification
Riparian/Wetland Vegetation Condition - Indicator of whether native riparian and wetland vegetation is functioning properly, functional-at-risk, or impaired	US Forest Service Watershed Condition Classification
Percentage of stream reaches where vegetation has converted from riparian to developed or agriculture cover	Riparian Condition Assessment Toolbox
Average annual stream temperature	US Forest Service NorWeST Stream Temperature Database
Percentage of water bodies listed as impaired by the state	US Forest Service Watershed Condition Classification
Indicator water quality issues above natural or background levels	US Forest Service Watershed Condition Classification
Indicator of cementation of streambed substrate	US Forest Service Level II Riparian Surveys
Percentage of water bodies listed as impaired by the state	Utah Department of Environmental Quality
Channel Shape and Function Attribute - Indicator describing whether width-to-depth ratios within a watershed are within the range of conditions expected in the absence of human influence	US Forest Service Watershed Condition Classification
% of stream segment with no change from riparian vegetation	Riparian Condition Assessment Toolbox

% of confined segment with conversion of riparian vegetation and replacement by developed land	Riparian Condition Assessment Toolbox
% of confined segment with conversion of riparian vegetation and floodplain development	Riparian Condition Assessment Toolbox
Average percentage of streambanks classified as stable	US Forest Service Level II Riparian Surveys
Mean proportion of conversion to invasive species occurring along stream reaches	Riparian Condition Assessment Toolbox
Percentage of stream reaches classified as confined by the RCA procedure	Riparian Condition Assessment Toolbox
Percentage of stream reaches with successional status classified as in late succession or potential natural community	US Forest Service Level 2 Riparian Surveys
Percentage of stream reaches with forage trend, based on condition and composition of vegetation, that was classified as stable or upward	US Forest Service Level 2 Riparian Surveys
Percentage of sites determined to be in desired condition based on overall trend, seral status, stability rating, and ground cover	US Forest Service Level 3 Riparian Surveys
