Recovery Potential Screening Tool:
Introduction and Overview

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Recovery Potential Screening (RPS)

- A framework for comparing a group of watersheds based on environmental, stressor, and social factors relevant for priority-setting

- Variety of applications, for example:
  - TMDL development
  - State nonpoint source program five-year plans & 319 grants
  - Water quality monitoring strategies

- RPS Tool files are easy-to-use Excel spreadsheets pre-loaded with watershed indicator datasets

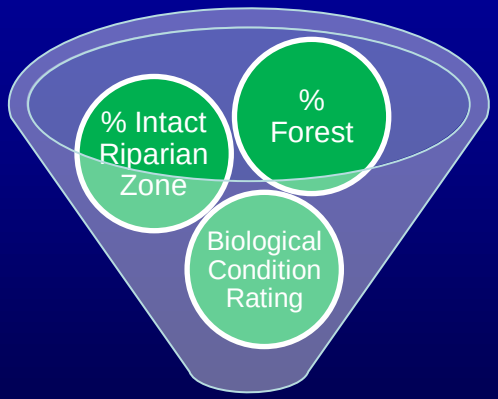
- Produced for all US states and territories

https://www.epa.gov/rps/downloadable-rps-tools-comparing-watersheds

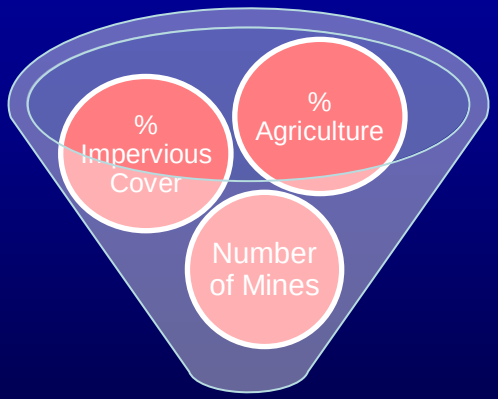
Recovery Potential Screening - Basic Concepts

- Indicator-based method for watershed comparison and priority-setting
- Indicators are measures of watershed attributes that are relevant to water quality restoration and protection

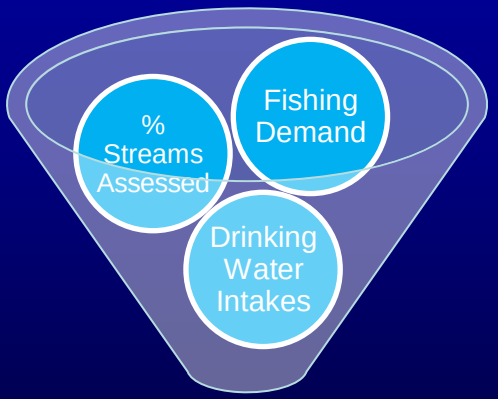
Ecological Indicators



Stressor Indicators

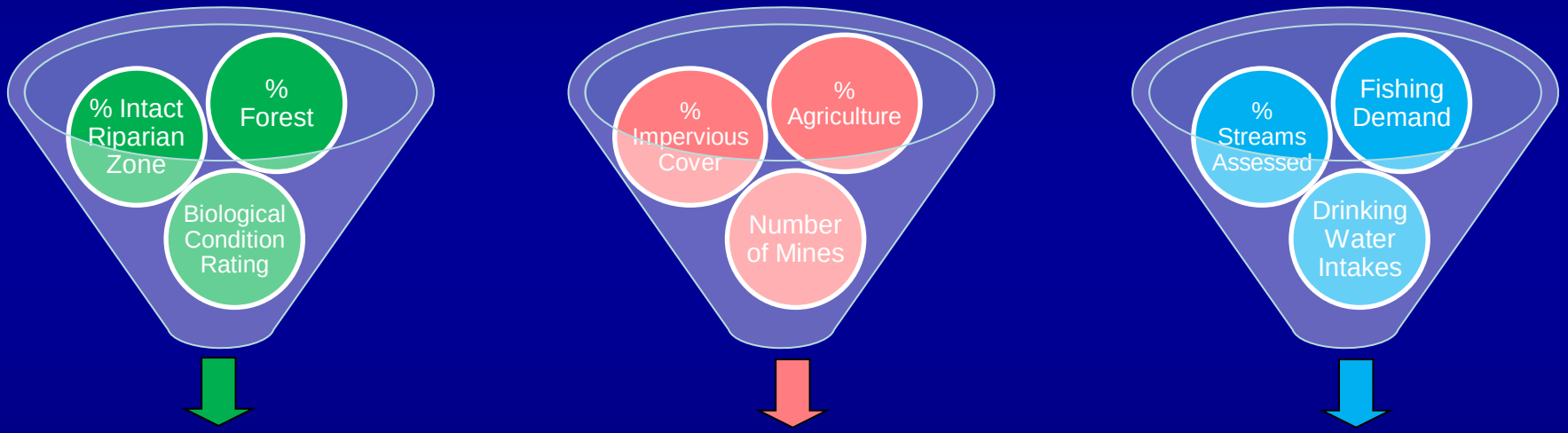


Social Indicators



Recovery Potential Screening - Basic Concepts

- Indicators are combined into Index Scores – overall picture of ecological, stressor, and social characteristics



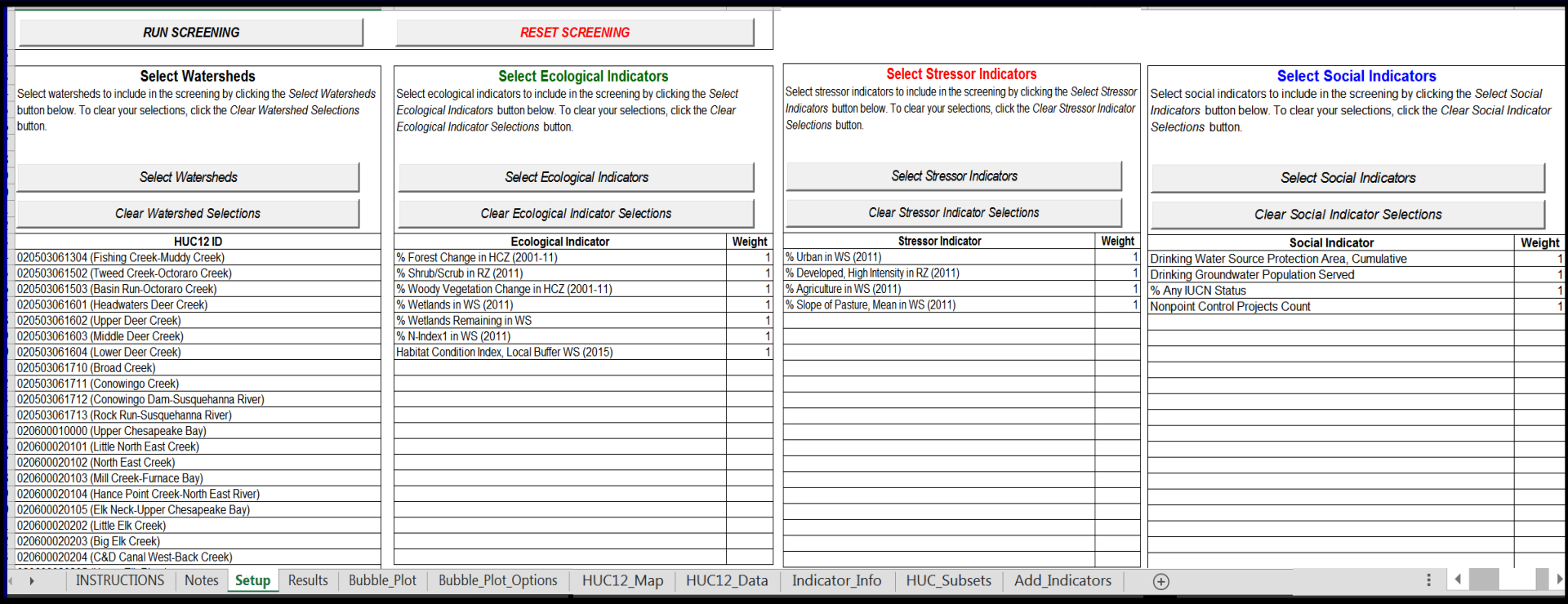
Ecological Index
(High Scores = Better Condition)

Stressor Index
(High Scores = Greater Stress)

Social Index
(High Scores = Favorable Traits)

Recovery Potential Integrated (RPI) Index

Recovery Potential Screening Tool



RUN SCREENING

RESET SCREENING

Select Watersheds

Select watersheds to include in the screening by clicking the *Select Watersheds* button below. To clear your selections, click the *Clear Watershed Selections* button.

Select Watersheds

Clear Watershed Selections

HUC12 ID
020503061304 (Fishing Creek-Muddy Creek)
020503061502 (Tweed Creek-Octoraro Creek)
020503061503 (Basin Run-Octoraro Creek)
020503061601 (Headwaters Deer Creek)
020503061602 (Upper Deer Creek)
020503061603 (Middle Deer Creek)
020503061604 (Lower Deer Creek)
020503061710 (Broad Creek)
020503061711 (Conowingo Creek)
020503061712 (Conowingo Dam-Susquehanna River)
020503061713 (Rock Run-Susquehanna River)
020600010000 (Upper Chesapeake Bay)
020600020101 (Little North East Creek)
020600020102 (North East Creek)
020600020103 (Mill Creek-Furnace Bay)
020600020104 (Hance Point Creek-North East River)
020600020105 (Elk Neck-Upper Chesapeake Bay)
020600020202 (Little Elk Creek)
020600020203 (Big Elk Creek)
020600020204 (C&D Canal West-Back Creek)

Select Ecological Indicators

Select ecological indicators to include in the screening by clicking the *Select Ecological Indicators* button below. To clear your selections, click the *Clear Ecological Indicator Selections* button.

Select Ecological Indicators

Clear Ecological Indicator Selections

Ecological Indicator	Weight
% Forest Change in HCZ (2001-11)	1
% Shrub/Scrub in RZ (2011)	1
% Woody Vegetation Change in HCZ (2001-11)	1
% Wetlands in WS (2011)	1
% Wetlands Remaining in WS	1
% N-Index1 in WS (2011)	1
Habitat Condition Index, Local Buffer WS (2015)	1

Select Stressor Indicators

Select stressor indicators to include in the screening by clicking the *Select Stressor Indicators* button below. To clear your selections, click the *Clear Stressor Indicator Selections* button.

Select Stressor Indicators

Clear Stressor Indicator Selections

Stressor Indicator	Weight
% Urban in WS (2011)	1
% Developed, High Intensity in RZ (2011)	1
% Agriculture in WS (2011)	1
% Slope of Pasture, Mean in WS (2011)	1

Select Social Indicators

Select social indicators to include in the screening by clicking the *Select Social Indicators* button below. To clear your selections, click the *Clear Social Indicator Selections* button.

Select Social Indicators

Clear Social Indicator Selections

Social Indicator	Weight
Drinking Water Source Protection Area, Cumulative	1
Drinking Groundwater Population Served	1
% Any IUCN Status	1
Nonpoint Control Projects Count	1

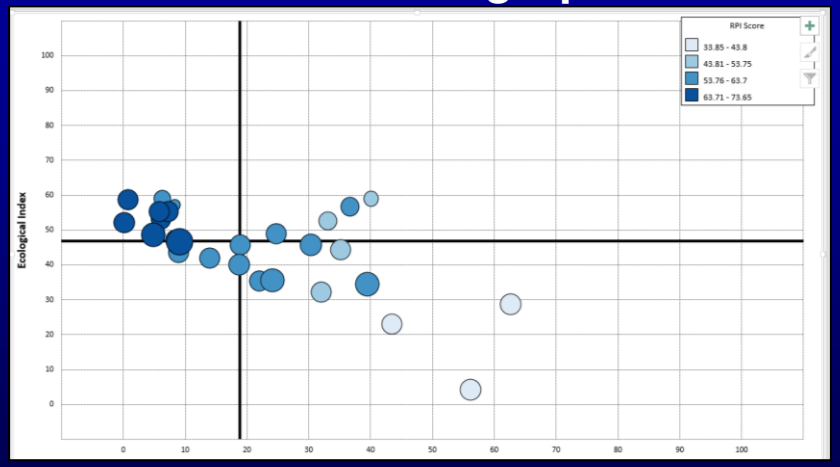
INSTRUCTIONS | Notes | Setup | Results | Bubble_Plot | Bubble_Plot_Options | HUC12_Map | HUC12_Data | Indicator_Info | HUC_Subsets | Add_Indicators

Recovery Potential Screening Tool

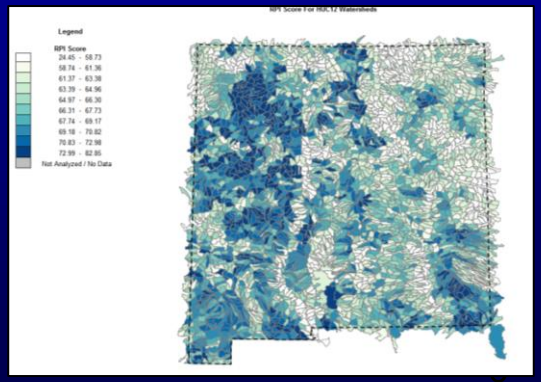
Tables with indicator values, auto-calculated index scores & ranks

Watershed Name	Ecological Index	Ecological Rank	Stressor Index	Stressor Rank	Social Index	Social Rank	RPI Score	RPI Rank
Sherman Creek-Lower West Branch Delaware River	49.18	474	6.63	199	14.57	1385	52.37	790
Balls Creek-Lower West Branch Delaware River	48.84	504	12.20	388	31.60	1300	56.08	499
Upper Equinunk Creek	49.14	476	12.70	413	33.33	776	56.59	466
Lower Equinunk Creek	50.66	361	6.33	192	33.33	776	59.22	244
Factory Creek-Delaware River	51.48	300	5.50	172	21.00	1360	55.66	534
Little Equinunk Creek	48.50	534	9.33	284	33.33	776	57.50	382
Pea Brook-Delaware River	51.74	278	3.15	106	6.33	1426	51.64	850
Hankins Creek-Delaware River	49.82	422	8.35	252	14.37	1387	51.95	826
Beaverdam Creek-Delaware River	47.40	616	9.58	293	24.37	1342	54.06	651
North Branch Calkins Creek	46.28	705	16.00	531	33.33	776	54.54	619
South Branch Calkins Creek	46.10	728	18.10	616	33.33	776	53.78	681
Peggy Run-Delaware River	49.54	444	7.23	212	15.53	1378	52.62	772
Masthope Creek	52.10	255	7.43	218	33.33	776	59.34	238
Westcolang Creek-Delaware River	51.00	333	3.98	132	15.17	1381	54.06	651
Johnson Creek	46.80	665	18.73	646	33.33	776	53.80	675
Van Auken Creek	47.16	641	19.13	662	33.33	776	53.79	678
Belmont Lake-West Branch Lackawaxen River	46.20	715	18.48	635	33.33	776	53.69	688
East Branch Dyberry Creek	49.74	427	6.35	193	33.33	776	58.91	267
West Branch Dyberry Creek	50.00	411	12.15	384	33.33	776	57.06	421

Customizable graphs



Customizable maps



Recent updates to RPS data and tools

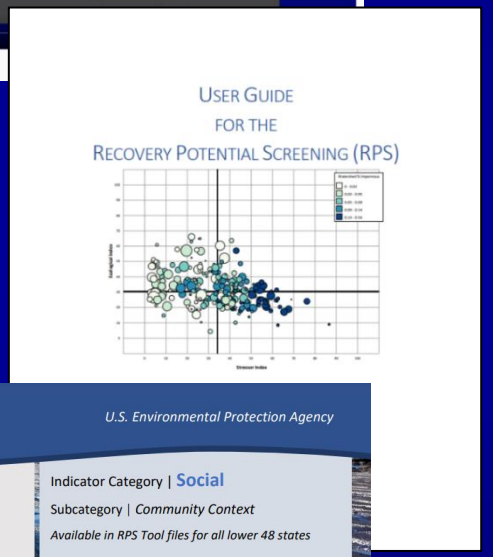
- New indicators added in August 2021 relevant to:
  - Environmental justice
  - Watershed vulnerability to future climate change

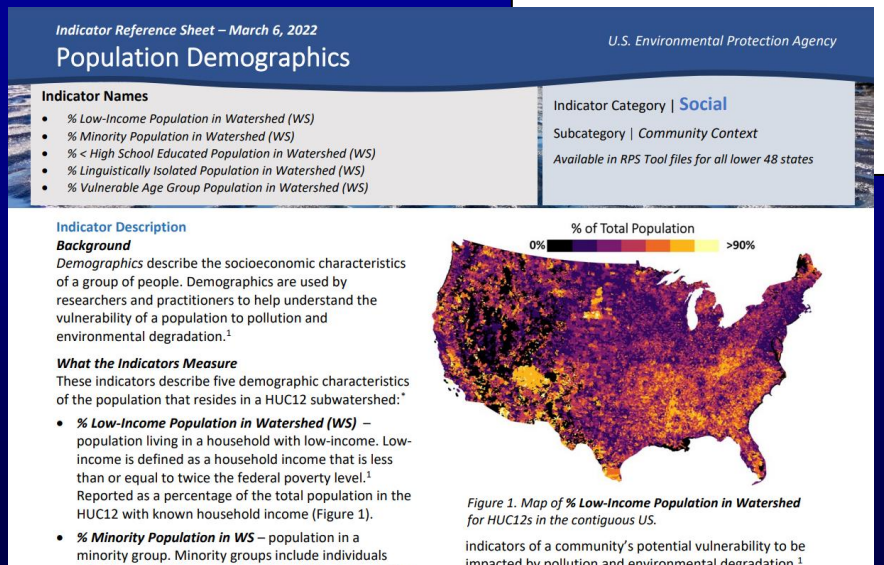
New Social Indicators	New Stressor Indicators
• Low-Income Population • Minority Population • Linguistically Isolated Population • Vulnerable Age in Watershed (under Age 5 or over 64) • Less than High School Educated Population • Mobile Home Parks Count	• Projected Change in Annual and Spring Runoff • Projected Change in Mean Annual and Summer Temperature • Projected Change in Annual and Summer Precipitation • Sea Level Rise Inundation • Nitrogen, Phosphorus, and Sediment Yield • Impaired Waters • 100-Year Flood Zone • Hurricane Storm Surge Zone • NPDES Effluent Violations • Toxic Release and Exposure Potential • Hazardous/Toxic Site Counts

RPS Resources and Support

- Tools and resources can be accessed at: https://www.epa.gov/rps
  - User Guide with step-by-step instructions
  - Video Training Series
  - Reports from past projects
  - Indicator Reference Sheets (https://www.epa.gov/wsio/indicator-reference-sheets)
  - RPS Scenario factsheets (coming soon)
- Technical support

Reach out to cira.emily@epa.gov for more info





Direct links to select indicator reference sheets:
Population Demographics
Projection Hydrologic Change
Projected Air Temperature Change
Projected Precipitation Change