

USDA-NRCS Stream Visual Assessment Protocol An Introduction

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Why Assess Streams?



- Overall sense of stream health and watershed health
- Identify problem spots
- Different from monitoring



NRCS Stream Visual Assessment Protocol (SVAP)

- Based on set of indicators
 - Channel condition
 - Hydrologic alteration
 - Riparian Zone
 - Bank stability
 - Water appearance
 - Nutrient enrichment
 - Barriers to fish movement
 - Instream fish cover
 - Pools
 - Invertebrate habitat
 - Canopy Cover
 - Manure presence
 - Salinity
 - Riffle embeddedness
 - Macroinvertebrates observed



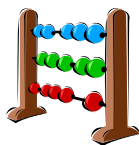
SVAP Procedure



- Assess a representative reach
- Reach = 12 times the active channel width, typically 100-300 ft
- Sketch – tributaries, springs, ponds, road crossings, LWD, pools, riffles, photo locations, adjacent LU
- Photodocumentation
- GPS coordinates



Scoring



- Maximum 15 elements
- Numerical rating for each element
- Calculate overall score and rating
- Score is an average for the reach; note highs and lows



Impaired riparian zones



Erosion



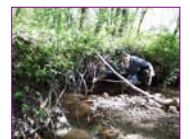
Sedimentation

Common Problems in Raritan Streams Observed during SVAPs



Altered stream channels

Undercut Banks



Limitations of SVAP

- Can't tell us about:
 - *Trends or changes in conditions*
How quickly is the erosion occurring?
Is what we see the result of several years of erosion? Or just a few?
 - *Exact cause of stream degradation*
Is the problem stormwater runoff?
Is the problem from residential sources?
Commercial sources?
- Information from other tasks will help answer these (and other) questions



Benefits of SVAP



- Adaptable for volunteer use
- Gives an overall sense of stream and watershed health and conditions
- Helps identify problem spots



What's Next? SVAPs in the Neshanic Project Area

- We need volunteers!
 - Willing to get wet!
 - Work in pairs
- Coordination by SBWA
- 40-50 SVAPs in project study area
- Training May 5 by NJWSA



Questions?

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