TECHNICAL NOTE

USDA NATURAL RESOURCES CONSERVATION SERVICE PACIFIC ISLANDS AREA

Biology Technical Note 9 –

STREAM VISUAL ASSESSMENT PROTOCOL 2

Purpose

The Stream Visual Assessment Protocol 2 (SVAP2) protocol was developed for use by conservation planners to visually evaluate the condition of wadeable streams and identify resource concerns associated with the stream and riparian corridor. This evaluation and planning tool gathers useful information to assist in determining Practices that can address resource concerns, but is not meant to be the project design process. If the conservation plan results in an on-the-ground project, appropriate technical specialists within and outside the agency will be part of the design process.

SVAP 2 Quick Start Overview (How To Use the Data Sheets)

Office/Pre-survey data (page 1 & 2):

- The Stream Visual Assessment Protocol 2 **Summary Sheet and Preliminary Field Data** sheet is meant to provide a broad overview of the area. The **Summary Sheet** should allow others to locate the property, and provide insights for what may (or may not) be found on the property. Refer to sites such as, Hawaii Watershed Atlas, HydroGuam, USGS Water data StreamStats websites to get drainage size, flow discharge data etc. **Preliminary field data** is observational in nature and visually assessed on site prior to beginning SVAP data collection.
    - Example use: If after running SVAP, it is noted that the stream turbidity is elevated with no on site management actions contributing, but the evaluator has documented that there are upstream forestry operations or a recent landslide then this provides important information for the planner to know and recognize that sediment may be a resource concern, but it cannot be addressed on site- even though a score for that particular aspect may be rated as poor.
- SVAP2 is meant to be ran on similar reaches of stream. So if a landowner's stream is all relatively similar (all in a steep canyon, all generally flat and meandering, or the same management actions are occurring throughout the property, etc.), run the assessment 1 time. It is recommended that you should walk/assess a representative length of stream that is approximately 12 bankful widths. IF the stream changes in character within the property, SVAP should be run again as a different reach.

Field Reference Sheet

- Best to complete during base flows.
- You will score 12 elements and then average them for an overall stream condition score. Not all elements will be applicable to your site. Skip those that don't apply.
- For each element read the description within the box and determine which most closely matches the conditions at your site. If the description matches completely circle the highest number available within that box, if it mostly matches then the middle number, if

it matches somewhat, but more than going down to the next descriptor box then the last number should be circled.

- Total score is calculated by adding the score of each element considered and dividing by total number of elements scored (divide by 12 if all questions were applicable, or some # less than 12 if not all were considered). This will give you an overall score of the stream condition. It is possible that a stream may be in overall good condition, but still have a few elements that are of concern. A common example is a good total habitat condition score, but a zero or 1 for Barriers. Or the stream is generally in good condition (total score above 7), but there are gaps in riparian cover (Riparian Area Quantity below 5) or the riparian community is primarily invasive species that are compromising the stream function (Riparian Area Quality below 5) so therefore the overall habitat hasn't degraded YET, and this is the perfect time to address this aspect before the riparian community and value in shading or bank stability degrades further and there is a larger (& more expensive) resource concern to address.