Skagit Watershed Council Technical Work Group (TWG)

February 16, 2017, 1:00 – 4:00PM, Meeting Notes Final

SWC Office, Mount Vernon

(*** indicates action item**; ___ indicates decision)

Attendance: Erik Andersen (Aspect Consulting), Chris Vondrasek (SWC), Alison Studley, Chair (SFEG), Bob Warinner (WDFW), Kari Odden (SLT), Doug Bruland (PSE), Devin Smith (SRSC), Jeremy Gillman (USFS), Tom Slocum (Skagit Conservation District), Rick Hartson (Upper Skagit Tribe), and by phone and webex, Erin Lowery and Ed Conner (SCL)

Guests: Leah Kintner (PSP, by phone and webex), Richard Brocksmith (SWC), Steve Hinton (SRSC), Allison Roberts (notetaker, Kulshan Services)

Presenting consultants: Ilon Logan and Mike Leach (ESA)

Meeting started at 1:15 pm (after phone and webex issues resolved)

Draft Agenda Approved (#1).

January Meeting Notes Approved (#2) with the following additions.

- The January notes should include the discussion of fish numbers as it pertains to the Lead Entity program. The minutes also need to reflect that the TWG made no decisions regarding this aspect of the Lead Entity program at the January meeting.
- The names of the five PSAR projects: the Skagit Land Trust Big Lake dock removal and invasives control, (2 parts of the Lake Creek Wetland Complex Protection #15-1172A), two SFEG riparian projects (Skagit BasinRiparian 2b #15-1614 and Collaborative Riparian Stewardship #16-1650), and SRSC Barnaby Reach project (the Barnaby Reach Preliminar Restoration design #14-1255) should be named in the notes.
- Also, the January notes say that SRSC's comments were the only comments to the guidance document, but SFEG also submitted comments.

Bob moved and Tom seconded to approve the minutes with the above additions. Vote was unanimous.

SWC Committee Reports

- Board of Directors – Richard Brocksmith – The Board approved the five project cost increases which have been sent to PSP and RCO. Richard indicated he would spend time at the end of this meeting sharing the Board's discussion of the Lead Entity Guide. Steve added that the Board had a lively and lengthy conversation regarding adjustments to the Guide. Richard noted the Board didn't have time to the address M & AM chair and member decisions, but they will take it up at their March meeting.

- Protection Subcommittee – Bob Warinner – The committee met twice last week. An acquisition project in the Alterra plat was reviewed and green lighted. The group also worked on the habitat assessments toward finishing the Protection Strategy Update.

SWC Riparian Habitat Protection and Restoration Strategy (link all docs here)

Richard introduced the discussion of the Riparian Habitat Protection and Restoration Strategy, and where the project is to date. Mike Leech of ESA presented details of the strategy and the methods they have applied since starting work in November 2016. ESA presented their progress to date and anticipate TWG feedback as they move forward with the assessment methods and results that they have developed.

- The TWG has been sent documents on the methods, the data sources lists, a comment/response matrix, and a webmap guide. The TWG had no further questions on these documents.
- Review of a draft of the riparian cover classification results and web map.
  Mike reviewed the input sources (WDFW land use classifications, 2013 imagery), other data, and presented a basic outline of image segmentation, rule set development, and the refinements to the classifications (spectral and textural characteristics, adjacency to other neighbors) that they used to develop the riparian cover classifications. The classifications include tabular outputs (to describe reach cover percentages by conifer, deciduous and mixed forest) and then stratified by elevation. ***Mike can provide input data to anyone who would like to see it.** WRIA 3 draft is complete and the WRIA 4 draft has 1.5% that remains unclassified. This cover classification data set will be the foundation for future riparian assessment. ESA has published the results as a tile service with log-in credentials for the TWG and other SWC users to review the information.

  ESA used manual interpretation of high resolution drone and NIR images to develop training data to define forest cover classes. They used open source tools for the segmentation and image analysis algorithm development. They aggregated the data into three height classes (0-70', 71-120', and over 121 feet) and the three forest types (conifer, deciduous, and mixed) with specific thresholds that determined which type of forest type characterized each polygon. If the project budget allowed, they could go further with this. This analysis will help determine the forest and riparian conditions based on the forest type and height. ***ESA will do more work on refining their definitions for the forest types.**

  ***Mike needs TWG help to improve the training data set for places with mixed and deciduous forests.** Using the webmap tools, TWG members can add site specific data and comments at any locations and provide direct feedback. ESA has been relying on Ken Pierce's work at WDFW to define the minimum mapping scale. Mike will confirm information on the minimum mapping scale, but it's most likely ¼ acre. He showed how one can use the transparency tools to move between the map imagery and the different forest cover classifications.

Much of the upper watershed and WRIA 4 lacks 2006 LiDAR or WDFW classification. These areas have required cover classifications through manual photo interpretation, a time-consuming activity.

The project has limited resources for a targeted field campaign. TWG crowd sourcing can help. Mike demonstrated the capability of the web mapping tool to allow TWG members to provide reference points and aid the refinement of the cover classifications. ESA also used Bing maps and Skagit iMap to supplement their data. ***Mike and Ilon asked for feedback based on the 2013 NAIP imagery which they are classifying from. In summary, they want TWG help to refine incorrectly classified areas as well as areas with no data sets/classifications yet.**

- Field data collection approach and sample data form
  ***To maximize their limited resources, ESA want TWG feedback within the next month using the Field Data Form shared with the TWG in their packet.** They want ID date, observer, dominant cover type, support with one or more photos plus any other attributes – height classes, basis species present. ***Mike can provide additional guidance to TWG member's teams who can gather ground information while they are in the field doing other work.** ***Devon asked that Mike to provide guidance/definitions of what conifer dominated and mixed forest definitions mean and at what stand sizes.**

- Conceptual models and riparian function – ranking matrix
  Ilon showed a couple of conceptual of riparian function models which have been refined based on TWG input thus far. The model takes into account riparian conditions, migration potential, and impairment. The data inputs include riparian cover classification results, Ecology channel migration datasets, USIT hydro-modification inventory, and WDFW data. With that data, they defined low, moderate, and high classifications for riparian, migration potential, and impairment.

  ***TWG should provide input on appropriate weighting using the vegetation type/height overlay. To gather information from TWG, ESA has created a Reach Sheet for gathering information.** It includes riparian cover, cover types, key metrics, importance, factors summary, and stats on page 1. This would be extrapolated to status and trends, strategies, and priorities on page 2. They need to know if proximity to channels would be on equal footing with veg type/height and whether the weighted overlay makes sense.

  ***TWG members felt ESA should look at the riparian width and the three classes within each reach.** One suggestion was to decide on the riparian corridor widths and look at percentages by defined important areas (protection, restoration…). Richard pointed out that the bigger the scale, the less valuable the info, so emphasis should be on the finer scale information.

- Next steps – Mike indicated that additional riparian assessment data and field work will be presented to TWG in March 2017. This will inform/guide strategies based on riparian condition, impairment, migration that can lead to different strategies. Next time they meet with TWG they will have results for both reach and finer scale. ***They want TWG input on how the information will be presented and incorporated/analyzed.**

- In summary, ESA should spend their time pulling together the best data for TWG to analyze, and tools to frame these questions and TWG will address the complex questions about restoration and protection.
- Devon had questions about spatial scale. He doesn't want the tool to build a model that shoves everything together. ***Mike will clarify this detail.**
- ***Members felt that individuals can go out to collect field data that ESA needs while they are doing their regular work.**
- ***Mike (ESA) will do a video screen share session to show people how to use the webmap tool and to incorporate their field work.**
- ***Comments are needed on the webmap by next Friday (2-24-17). Devon and Jeremy – perhaps others - will look at the webmap.**

- **SWC Protection Strategy Update** – Chris reviewed the four question areas discussed at the January TWG meeting. The Protection Subcommittee has been working on them since then.
  1) "Piano Key" properties – Piano key properties are defined as small parcels, contiguous, sometimes along the shoreline or nearby, sometimes with isolating features such as roads, although occasionally connected to protected lands. There are 1000+ small parcels in the floodplain with these characteristics. In the habitat assessment ~260 would qualify to be greenlighted and qualifying for purchase and protection. The Subcommittee recommended that these 1000+ piano key properties be kept in the assessment results, but excluded from use by SRFB block grants. Keeping them in the assessment results means that other funding sources could be used. The Subcommittee described these parcels (small, likely with structures or roads, possibly within a homeowners association) as "shoe-boxed." Richard outlined a couple parcels near or adjacent to protected lands that were left out of the shoe-box (and remain eligible for acquisition using SRFB Block Grants).

  2) Chris noted five locations where the parcel is in the center of the river, properties that would normally score well, but they didn't get green lighted because there were no terrestrial forest or edge habitats to quantify. Chris consulted with an aquatic lands specialist at DNR, to check on the ownership of these parcels, as when the river gobbles up these parcels through accretion, they can become state aquatic lands. In other situations, such as avulsion, the landowner may maintain ownership. The recommendation is to review these parcels and any possible acquisition on a case-by-case basis.

  3) The effect of floodplain/riparian buffer habitat on parcel scoring:
  In the January TWG meeting questions were asked about whether the assessment of the floodplain/riparian buffer areas incorrectly overvalued uplands or areas distant from aquatic habitats. Chris described two tests the Subcommittee used to evaluate how habitat scores would change if the buffer classifications were treated differently. One test removed the floodplain/riparian buffer from the assessment calculations completely. This manipulation demonstrated that without the addition of forested buffer habitat areas that

large floodplain agricultural lands tend to increase in relative value and smaller forested parcels with a large portion of their habitat areas within the buffer area decrease in relative score.

Along the middle Skagit River from the Sauk River to SR 9, the second test spatially analyzed the amounts of habitat areas of the floodplain/riparian buffer that were adjacent to aquatic fish habitats (and so correctly counted as riparian habitat) or had never been counted (as they were isolated by roads or hydromodifications) to address the question of whether habitats had been valued rightly and determine the "habitat-ness" of the buffer areas that had been counted. This test illustrated that ~325 acres of ~14,780 acres in the middle Skagit test reach were neither adjacent to channels or riparian habitat nor already isolated from the assessments due to roads or infrastructure (they were questionable as far as inclusion for their habitat value).

Alison Studley pointed to the SWC 2015 Strategic Approach document and how there may be question about whether the riparian buffer areas in the Tier 1 floodplain were implicitly not included to be assessed, whereas riparian buffer areas in Tier 2 and tributaries floodplains were to be considered and assessed for their habitats. After some discussion, the TWG members understood the Strategic Approach as written, but were not convinced that Tier 1 floodplain/riparian buffer areas should not be included in this protection strategy update, and that only those floodplain/riparian area buffers in Tier 2 areas should be included. The Protection Subcommittee would review the question.

As a next step Richard asked if a joint meeting with TWG and the Board would be helpful. The TWG did not feel it needed this level of discussion.

Question – Kari asked if protection projects can be done if LIDAR data isn't available. The answer was: It's excluded from the scoring, but not eligibility.

4) Chris spoke about places along the Skagit where it appears 2 or more nearby and similar parcels scored very differently, without obvious reasons. He looked at the underlying data, and found the scoring differences could be accounted for due to differences on the ground. Commonly nearby parcels had different amounts of isolated habitat areas due to roads or infrastructure, or very different habitat scores due to pastures or plowed fields adjacent to forested parcels, or different areas beyond the buffer where these parts of the parcels did not receive habitat scores.

- **2017 Lead Entity Program Guide**
  Richard summarized the Board's recent discussion about SRSC comments on the Lead Entity Program Guide. The TWG confirmed their commitment to continuous improvement of this document. After some discussion, the TWG decided:
  - Non-technical suggested changes (administrative) should be looked at by the Board not TWG
  - Project proponents must respond to critical questions. Suggested questions do not need to be responded to, but responses are recommended.

- Not enough time exists to further review additional cost benefit analysis for proposal review this year, so postpone including this requirement to next year. The TWG should revisit the inclusion of cost-benefits analysis in project proposals.
- Fish numbers should not be a requirement for every project but should be included when good information is available such as in the delta. Fish numbers are hard to quantify in certain areas of the watershed.
- Deliverables – no change in due date from 2016 LE guide However deliverables do not need to be up in PRISM when draft applications are due. Deliverables do need to be made available to all TRC members.
- Regarding projects considered for funding in the 2017 RFP (Appendix B), they removed the word "standalone" from 1) Habitat restoration and protection projects.

Bob moved that the changes be approved and Chris seconded the motion. All approved.

- Technical Review Committee participation and SRFB Project reviews among TWG members – Kari Odden will be unavailable, but all other TWG members are willing to help.

4:15 PM Adjourned

Next TWG/TRC Meetings

- March 23, 2017 – Review LOI's. Not meeting at regular time.
- April 20, 2017
- May 8, 9, 10 and June 28, 2017 (TRC Site visits and scoring meeting)