

Lower Skagit River Tributaries Temperature Implementation Strategy

Meeting Two

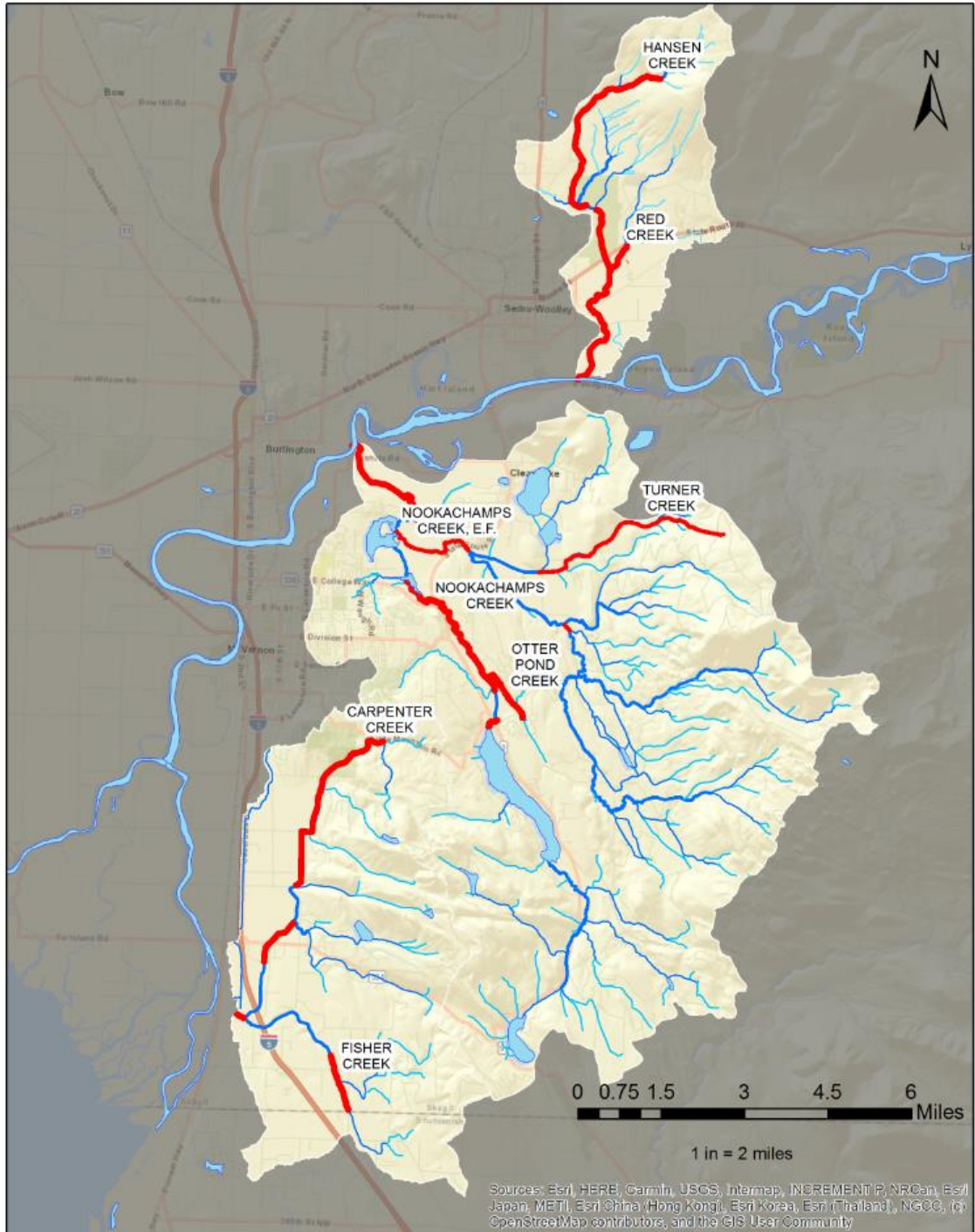
August 29th, 2019

Open dialog and discussion

- Be Respectful
- Please give others the freedom to speak candidly and express ideas.
- Please don't interrupt

It's Rude
To Talk
While I'm
Interrupting





Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



Morning Agenda

10:00 – 12:00

- Opening comments/review past meeting information.
- Summary of data used to establish watershed condition.
- TMDL, VSP, and local efforts discussion
- **-Break-**
- Detailed discussion – Strategic Planning
 - Scale of efforts
 - Watershed selection



Afternoon Agenda

1:00 – 2:30

- Discuss the groups or “buckets” of topics identified in the previous meeting
 - Small group activity
 - Large group discussion

- Summary discussion



First Meeting Activities

- The first activity was designed to collect information and look for common topics or ideas.
- Ecology staff tried to sort out the ideas into groups or “buckets”



What were the common topics?

- Funding
- Education
- Strategic planning
- BMP/Riparian plantings
- Policy
 - General policy recommendations and ideas
 - Regulatory approach
- Data and research.



What is needed to be successful?



Meetings and Timeline

- Three meetings – July, August, and September
 - PSP meeting on October 1st or 2nd.
 - Prepare the Strategy by the end of 2019
- Additional meetings in October and November
- Project goals and expectations



Group thoughts?

- Comments or discussion about the meeting notes?
- Additions or corrections to the agenda
- Additional comments or thoughts regarding the strategy development?



Characterizing the watershed

- “Detailed implementation strategy with common understanding of goals, limitations, and community values. Milestones.”
- “Transparent documentation of the existing conditions, implemented projects, and accounting system of implementation projects/milestones developed by Ecology.”



Riparian Assessments

- “Lower Skagit River tributaries riparian vegetation change assessment results” (WA ECY, 2007)
- “Mapping Riparian land use within Agricultural Zones” (Skagit County, 2010)
- “Skagit Watershed Council Riparian Assessment” (SWC, 2017)



Riparian Assessments

- Skagit Watershed Council Riparian Assessment, 2017
 - Based on the WDFW HRCD dataset.
 - Incorporated the dataset of riparian plantings of seven primary implementation partners.



SWC Riparian Assessment

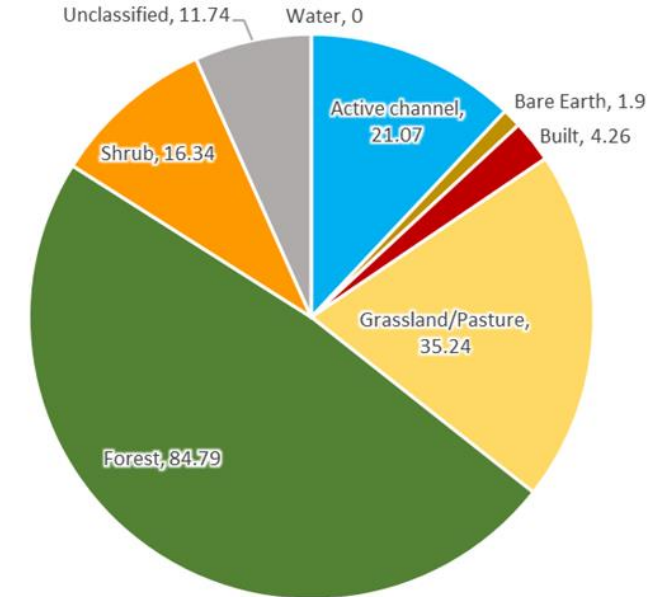
Metric		Classes	Origin and/or Connection
Riparian Condition	Cover Type	Dirt/bare earth	<i>High-Resolution Land Cover Classification (WDFW 2013)</i> <i>Riparian Cover Classification (ESA, 2017)</i> <i>Forest Practices Watershed Analysis Manual Appendix D – Riparian Function Module (WDNR 2011)</i> M&AM Common Indicator: Riparian – Spatial extent and continuity
		Grassland/landscaped (cleared, lawn, landscaped areas)	
		Shrub-dominated	
		Forest cover classes (Conifer-dominant, Deciduous-dominant and Mixed based on riparian cover classification)	
	Canopy Height	0-20 feet	<i>LiDAR Canopy Height Model (USGS, 2006)</i> <i>PhoDAR Canopy Height Model (WDNR, 2015)</i> <i>Simple tools to estimate impacts of development on water quantity, water quality, and riparian processes (Roberts 2003)</i>
		20-60 feet	
		>60 feet	
	Area Proximal to Active Stream Channel	0-20m (0-66 ft)	<i>SWC Habitat Protection and Restoration Strategy (SWC 1998) and SWC Strategic Approach (SWC 2015)</i> M&AM Common Indicator: Riparian – Spatial extent and continuity
		20-40m (66-131ft)	
		40m-91m (131-300 ft)	
		>91m (300 ft) (Within Floodplain)	

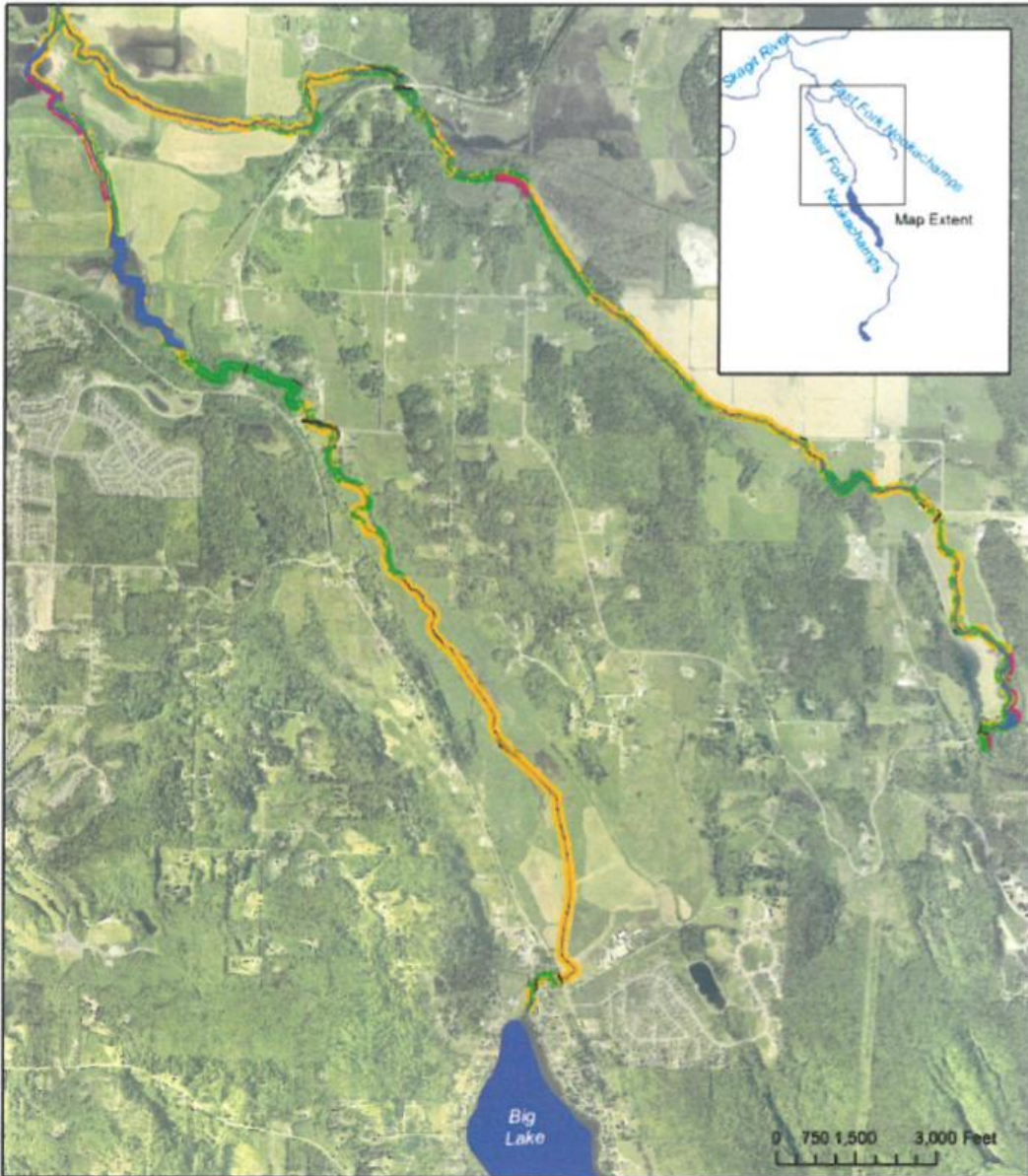


Data Example



East Fork Nookachamps
Riparian Cover Acres 0-40 M

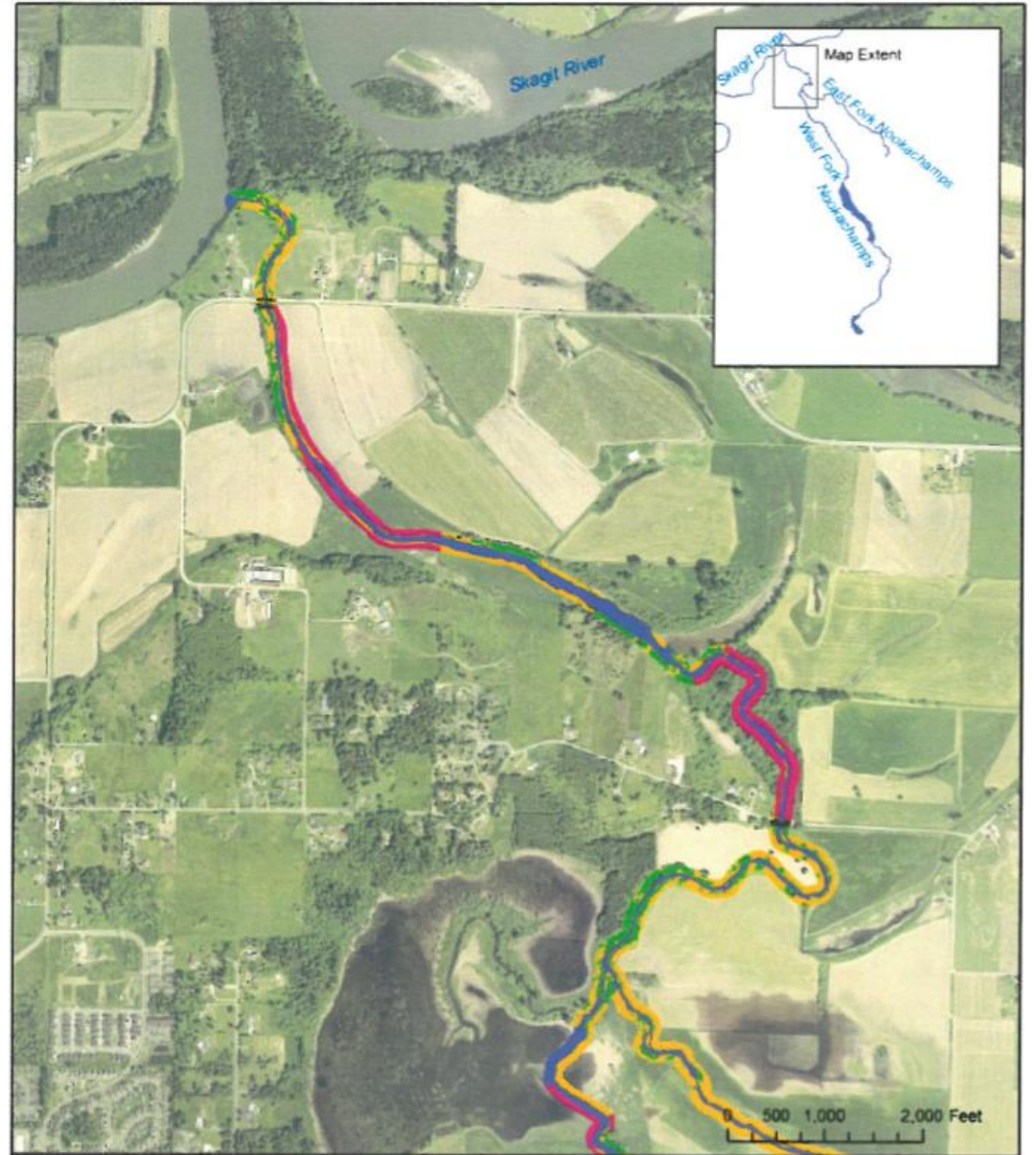




**Nookachamps Creek Riparian Functionality
Middle Reach (Map 2 of 3)**

- Functional Vegetation
- Dysfunctional Vegetation
- Open Water
- Riparian Plantings
- Infrastructure

Map by Brenda Clifton May 30, 2018 Skagit River System Cooperative 2017 Photo: Pictometry/Skagit County SRSC makes no claim as to the completeness, accuracy or content of any data contained herein No part of this document may be reproduced without prior permission of SRSC



**Nookachamps Creek Riparian Functionality
Lower Reach (Map 1 of 3)**

- Functional Vegetation
- Dysfunctional Vegetation
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Map by Brenda Clifton May 30, 2018 Skagit River System Cooperative 2017 Photo: Pictometry/Skagit County SRSC makes no claim as to the completeness, accuracy or content of any data contained herein No part of this document may be reproduced without prior permission of SRSC



Existing and ongoing efforts

- Continue quantifying existing implementation efforts.
- Efforts to review the riparian corridor status are useful, but they do not include the human element.



Local efforts and prioritization

- Voluntary Stewardship Program
 - Work plan provides a summary of the history related to the GMA, CAO, and adoption of VSP.
 - It also include state and local initiatives.
- How existing programs relate to the TMDL goals



VSP

- “VSP enables Skagit County to protect and restore riparian streams and other critical areas on agricultural land through new voluntary programs and coordination of existing programs, instead of new regulation.”



VSP goals

- It provides focus and direction for agricultural stewardship, measurable goals and benchmarks.
- Benchmarks are goals are included under the Participation and Enhancement categories.
- Protection is also included in the work plan.



Participation Goal Table

Metric	2018	2019	2020	2021	2022
Enrollments in local voluntary enhancement programs (e.g. NRSP)	5	10	15	20	25
Enrollments in current use open space tax program	2	4	6	8	10
Enrollments in CREP, WRP, & other relevant federal programs	3	6	9	12	15
Protective easements	2	4	6	8	10



Enhancement

Sub-Basin	Stream Miles	Existing Buffer (acres)	Enhancement Benchmarks (acres)		
			2020	2025	2030
Samish	118.2	1,156	+5	+10	+15
Lower Skagit	224.4	526	+2	+4	+6
Fisher Carpenter	7.3	61	+0.5	+1	+1.5
Nookachamps	40.5	579	+2	+4	+6
Middle Skagit	155.1	2,727	+5	+10	+15
Upper Skagit	22.5	418	+2	+4	+6
Sauk	12.5	215	+1	+2	+3



Viability of Agriculture

- VSP's greatest benefit to agricultural stability and security is avoiding the specter of mandatory buffers on agricultural land.
– (page 66)



Viability of Agriculture

- The County's Environmental Impact Statement on its 2003 Ag-Critical Areas Ordinance
 - 75-foot buffers on ongoing agricultural lands located on Type 1–3 streams
 - and 25- foot buffers on Types 4–5 streams
- **3,142 acres** - estimated cost **\$6,789,293 - \$12,824,714** (2003 dollars)- lost market value of land and maintenance cost



Estimated plantings

- Lower Skagit Tributaries Riparian vegetation change analysis (2007)
- - **515.6 @ 50'**
 - **1554.6 @150'**

Creek Name	50-foot	150-foot
Carpenter	84.1	253.3
Fisher	28.5	86.0
Hansen	75.0	224.4
Lake	46.4	138.4
Nookachamps	95.3	283.8
East Fork Nookachamps	53.6	160.9



TMDL goals

- ~~100% of stream planted by 2020~~
- Meeting stream temperature standards by 2080
- Predicted effects of climate change *



VSP and TMDL goals

- *All ongoing agricultural activities must be conducted so as not to cause harm or degradation to the existing functions and values of FWHCAs in and adjacent to watercourses (the “no harm or degradation” standard). For purposes of this Section, the phrase “no harm or degradation” means the following:*

– VSP work plan, page 77



VSP and TMDL goals

- ***(ii) Meeting the requirements of any total maximum daily load (TMDL) water quality improvement projects established by the Department of Ecology (ECY) pursuant to Chapter 90.48 RCW;***

– VSP work plan, page 77



VSP and TMDL goals

- (iv) Meeting the specific watercourse protection measures for ongoing agriculture specified in Subsection (4) of this Section; and
- (v) No evidence of significant degradation to the existing fish habitat characteristics of the watercourse from those characteristics identified in the baseline inventory described Appendix 3.



What are the goals of this effort?

- Lowering water temperatures, using the most beneficial and cost effective methods.
- The goals should not be less than the TMDL goals.



TMDL/Strategy goals

- Where does local community enter into this discussion?
- How do we estimate impacts to the local economy?



Group discussion

- Voluntary focus
 - Are we looking to adapt programs to increase participation? What levels of program change are we willing to make?
 - What rate or level of participation will prevent external influence? Is that the goal?



What were the common topics?

- Funding
- Education
- Strategic planning
- BMP/Riparian plantings
- Policy
 - General policy recommendations and ideas
 - Regulatory approach
- Data and research.



Digging into our buckets

- Please separate into groups of 3-4 people
- Please take 10 minutes to discuss your selected topic
- Have a note taker for the group, and be prepared to share your discussion with the group



Funding

- What programs are available?
- Incentives
 - What should they be?
 - Who funds them?
- What are the funding mechanisms?



Education/Outreach

- Who is the face of the program?
- New messages, aimed at local benefit
- What sort of message or approach?
- Who has the capacity for the work?



Strategic Planning

- Setting milestones
- Near term actions/Larger policy Issues
- Program flexibility



Riparian plantings/BMPs

- Riparian plantings – In water work
- Combinations or “suites” of BMPs
- Incentives for buffers or multiple BMPs
- Easements
 - Easement availability/programs
 - Are higher payments to key to increasing implementation?



Data and Research

- Do we have enough monitoring?
 - Effectiveness monitoring
 - Adaptive management
- In channel work
 - Cold water refuge
 - Water retention/Restoration potential
- Data gaps?



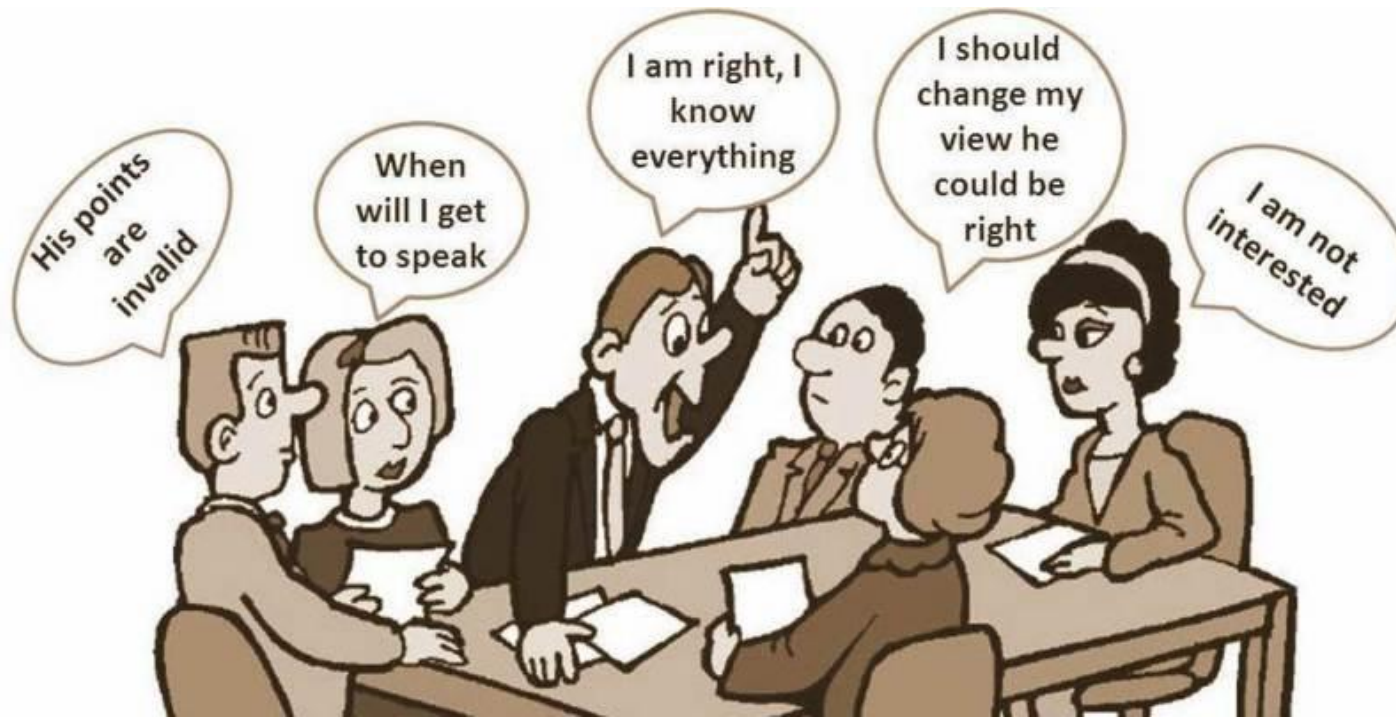
Policy Recommendations

- Near term actions/Larger policy Issues
- Regulatory backstop
- PSP resolution



Summary discussion

- Please share what your group discussed.



Thank you

- Additional discussion
- Ecology will summarize the meeting notes and distribute to the group.
- Feel free to submit additional comments or information for the group.



Next meetings

The next meeting is scheduled for:

Friday, September 27th – 10:00 – 2:30

Mt Vernon Police Station Community Room

PSP meeting – October 1st and 2nd.

Additional meetings - Late October and November

