

SCIENCE TO POLICY SUMMIT:

Sharing Information + Sharing Values & Needs = Sustaining Our River

SUMMIT SUMMARY REPORT



INTRODUCTION

The Lower Columbia Estuary Partnership (Estuary Partnership) hosted our 11th annual Science to Policy Summit on Friday, June 2, 2017 at the Vancouver Hilton. Scientists, communication and natural resource professionals, and educators came together to discuss how we can do a better job making science and data more relevant to more people.

Science impacts us all, and it is complex and dynamic. We often communicate science in very technical terms and we don't relate its impacts to people and their livelihood, health and wellbeing. Science also competes with an excess of information, multiple sources, shorter attention spans, competing narratives, and political polarization.

We must learn how to communicate science and environmental information more effectively. Science and facts matter; they are critical to informing individual actions and policy decisions that protect clean water and the Columbia River. We need to bring science home to individuals, communities, and business people in a language that is relevant to them.

CHARGE FOR THE DAY

***The Honorable Suzanne Bonamici,
United States House of Representatives***



"You can't build consensus without building relationships. Everyone basically wants the same thing, we just have different opinions on how to get there."

Representative Bonamici opened the day, setting the stage for the expert panel and audience discussions. As founder and co-chair of the Congressional STEAM (Science, Technology, Education, Arts, and Math) Caucus, she places significant weight on using science and helping the next generation think critically and creatively.

The Congresswoman had several key messages to share: Communication is important to protecting our investment in science. Now is the time for more science and research, and local entities need to step up—especially with the U.S. withdrawal from the Paris Agreement. Ultimately, we need to find common ground *even if we don't agree on all the issues.*

Looking forward to educating our future leaders, we need to promote media literacy and we need to integrate the arts with science to inspire innovation.

PANEL DISCUSSION: *Experts Weight In*



DAMEON PESANTI
The Columbian
Journalist



SUSAN HOLVECK
Beaverton School District
Science Teacher



KIM ORION
LKE Corporation
Business Owner



ROB DUFF
Governor Inslee's Office
Policy Advisor



JANINE CASTRO
USFWS/NOAA
Scientist

"I am a community partner and ally—don't be afraid to reach out. We can take your science and show people how it impacts their everyday lives."

"Our job is to produce a literate citizenry that participates in science. Science is for everyone."

"Make communication personal. Reframe science in a way that communicates impact to the everyday lives of local people."

"Find the champions within a community to maintain credibility. It's easier to maintain credibility than to regain it back after its been lost."

"The question is, do you understand your science well enough to communicate it clearly?"

What is good communication?	Be clear, concise, accurate, and transparent.	Know your audience. Communication should relate to their experiences.	Keep your message simple. Tell people how they will be affected.	Be a good listener. People must know you care before they care about what you know.	Communication should be a two-way process; all parties need to be heard.
What are mistakes in communicating science?	We need to tell the success stories and demonstrate the positive outcomes.	We are not creating scientifically literate adults. Oregon is currently 50th in the country for time spent learning science in the classroom.	We can ignore the science, but in the end, the river will win. Make science relevant, show the impacts in <i>their</i> world, not yours—seeing is believing.	Not recognizing the needs or motivations of the audience.	Creating barriers in communication. Farmers, nursery owners, etc. are scientists too; they observe and experiment. Starting a conversation with "Hi, I am Dr...." is off-putting.
How do you communicate and build relationships with the press?	When you approach the press, have a clear idea of your story and how it impacts people. But be open to us not seeing the story your way and be willing to discuss challenging information.		The story should communicate impact to local people (i.e. jobs created and flood reduction to personal property).	Provide regular updates and information to the press, even if they don't run a story. When a difficult issue comes up, you will have that relationship to rely on and the press will have context.	
How do you build trust and credibility to make science relevant?	Address the issue head-on and deconstruct any misinformation to create a new parallel narrative.	We must listen to everyone's experience to make science relevant and meaningful.		Admit when you don't know. Know when we have enough information to act and when we need more.	Don't separate people by using jargon. Clarify your science by stripping it down to its essence.
How do you establish reliability of information with so many sources today?	Be the source that is providing the larger context and tell people whats at stake.	Most information is digital these days and we need to teach media literacy. We need to teach ourselves and especially our children how to discern information and sources.	Find people in the community who agree <i>and</i> disagree to help you talk with their peers.	Think about the messenger and what their objective is. Think about who you are talking with and what is important to them.	Listen and learn how to talk in shorter statements, without lots of charts and graphs.
How do you communicate within the context of values, or cultural or political beliefs?		Respect and appreciate home cultures in the classroom. Ask children " <i>what are your ideas?</i> " to promote curiosity. Place-based learning makes science relevant.	Both my father and grandfather believed in climate change but did not see the connection between coal and diesel. The connection needs to be made with how personal choices have an impact.		Show passion for what you do. Emotions create connections. Build relationships with local champions and develop a network to deliver your message.



AUDIENCE INPUT:

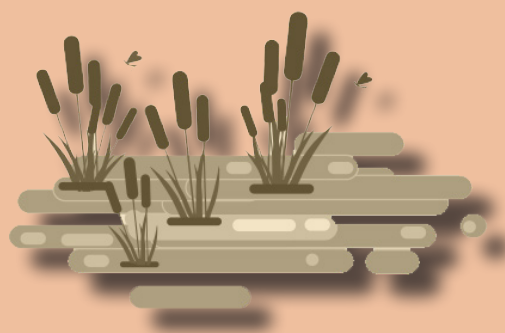
- Be more open to information from more sources, not just those that reinforce our current thinking.
- Acknowledge fear and communicate hope. Maintain a sense of wonder, joy, and intrigue, and encourage excitement and enthusiasm in others.
- Talk about the implications of not acting.
- Listen first before you explain what you want. Often you are both talking about the same problem but are using language that doesn't make sense to one another.

GROUP DISCUSSION: *Audience Weights In*

TIPS & TOOLS

THE PROBLEMS

1. We are **entrenched in our beliefs** and our world views are difficult to change.
2. We can **self-select our news** to fit our existing beliefs. We interact less and less with people from different perspectives and backgrounds.
3. We **lack relationships** with those we are trying to communicate with.
4. Building relationships, trust, and credibility take time and resources, which **are difficult elements to fund**.
4. Science is **uncertain and complex**, making it difficult to communicate in a sound bite. Science happens incrementally, and it's hard to be patient.
5. There are **overabundant sources** and audiences, and messages get lost in the "noise."
6. Facts are not as important as **recognizing the values and needs** of the people we are communicating with.
7. Environmental groups have **neglected communities of color and low-income audiences**.



CREATE CONNECTIONS

- **Invest the time to get to know people.** Immerse yourself in their community to understand their values, beliefs, and vocabulary.
- Be transparent, honest, and vulnerable, and **keep lines of communication open** and active.
- Use humor, **be authentic**, and find ways to relate to your audience.
- Start by meeting people on their home turf and **asking what they think the problem is**.
- **Practice empathy**—understand and validate your audiences' beliefs, especially when they are different than yours.
- Listen and ask follow-up questions to **show you understand and care** about what your audience is sharing.
- Validate concerns and **be up front** about what you don't know.
- **Constructively disagree** and understand what is behind dissenting opinions.



USE TECH & GRAPHICS TO COMMUNICATE COMPLEX DATA

Illustrate your message through **clear, understandable visuals and infographics**.

Use **ArcGIS** to create interactive story maps.

Technology is generational, **use generational tools**.

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DEVELOP A CLEAR MESSAGE

Determine who is your audience and **what works for them**.

Keep it simple. **Don't distract from your message** with details you think are interesting.

Speak the same language as your audience and **avoid jargon**.

Use terms that **relate to people's lives**, like flooding, storms, and drought versus climate change.

Bring messages back to **common values and common purpose**, like clean drinking water.

Complex information can become distorted or misunderstood as it is passed along. **Distill it so it can be absorbed**.

Be succinct and know what is relevant to your audience.

ENLIST SUPPORT FROM TRUSTED COMMUNITY INFLUENCERS

Think about **who is delivering your message**. A scientist or agency staffer might not be the best person.

Peers convey information in ways that are most meaningful and trusted.

Listen first. Validate other's perspectives and needs.

BE RELEVANT

Tell stories and **show impact**.

Share personal experiences or share a story of how your science impacts one person. **Integrate science into a narrative**.

Include in your message something useful that **your audience can use or share with others**.

Global examples can be powerful, but many folks have a strong loyalty to place and **care most about impacts to their local community**.

Meet people where they are versus where scientists think they should be.



BE INCLUSIVE

- **Engage all community members** from the beginning.
- **Make communication and outreach a key component** of your research and science.
- **Understand the baggage of your own institution** when you go out in the community.
- **Know why it's important** to your audience, and lead your message with that.
- Different people respond to different communication styles, so **develop multiple methods** to communicate the same idea.
- Not everyone will attend an open house. **Use multiple ways to get information beyond meetings**. Use questionnaires and surveys aimed at individual user groups. Get help from community groups to get input from their constituents.
- Include more **rural and agricultural areas** in messaging and outreach.



CHANGE THE MESSAGE

Include the **non-ecological benefits** (economic, human health, recreation) of restoration, contaminants reduction, climate change mitigation, etc.

Create **shorter summaries of data** that can be easily consumed by partners and the public.

Use videos and infographics to communicate.

Climate change and other issues are huge, and **folks need concrete actions they can take**.

KNOW THE CULTURAL CONTEXT

"Because of historical injustices and harmful government policies, it can be difficult for



Tribal peoples and Tribal governments to fully trust federal and state government agencies. And it is important to consider that each Tribe has a different history and relationship with the government. This mistrust can impact communication.

Building relationships for good communication takes time and patience. For the Native American community, telling stories is an important way to create personal connections, build trust and communicate beliefs."

Meagen Flier
Environmental Resources Specialist
The Confederated Tribes of Grand Ronde

WHAT THE ESTUARY PARTNERSHIP CAN DO

Science to Policy Summits expand dialog among scientists, practitioners, and community leaders. Each year, we tackle an emerging issue that needs regional attention, such as habitat restoration, climate change, the Columbia River Treaty, and toxics. Summit participants also identify areas where the Estuary Partnership can support regional goals and fill gaps.



SHOW THE SCIENCE

Host **tours at restoration projects** and bring all the project parties and community members together.

Convene conversations among all agencies working on monitoring and reporting so **collaboration becomes stronger across jurisdictions**.

Demonstrate cause and effect. For example, when a swimming area closes, talk about what individual choices cause that, such as lawn fertilizer or pet waste.

Be a clearinghouse for **estuary science information**.

Provide environmental education **programs for adults**.



BUILD COMMUNITY AND DIVERSIFY

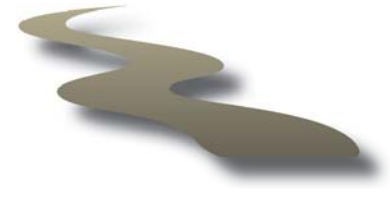
Find **new platforms** to encourage community engagement from different audiences and age groups.

Mentor others so that all people are empowered to share the message—**help others become the experts**.

Engage with folks throughout our study area, through peer-to-peer exchanges and non-traditional events. Engage audiences outside of the science community and those that have different perspectives.

Build strong relationships, especially with community leaders and influencers to reach other folks.

Pick up the phone and talk with people.



KEEP THE COLUMBIA AND PEOPLE AT THE CORE

Raise awareness of the interconnections—**the estuary is the gateway to the ocean and the Columbia Basin**.

Reconnect people to the river and nature, and through that reconnect people to each other.

Help develop a **common message for groups involved in the lower river**. Help different communities understand each other's concerns.

Host an **event focused on river storytelling**, with different people from different backgrounds sharing their stories, to build understanding and credibility.

THE ESTUARY PARTNERSHIP

The Estuary Partnership was created in 1995 by the governors of Washington and Oregon and the US Environmental Protection Agency when the lower Columbia River was designated 'an estuary of national significance,' making it one of 28 National Estuary Programs. To address the more than 50% habitat loss and contaminated water, sediment and fish tissue, the Estuary Partnership provides regional collaboration, unifies efforts, and fills gaps to advance on-the-ground improvements.



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