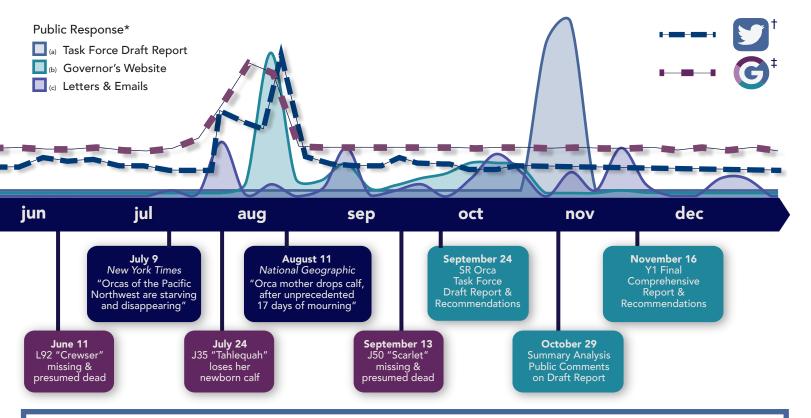


In March of 2018, Governor Inslee formed a task force to develop recommendations for the recovery of Southern Resident orcas in Washington. In the months prior to release of the recommendations, the loss of a newborn calf and two juveniles resulted in increased media exposure of the plight of the orcas in Washington. Amplification of these events on social media increased public awareness and catalyzed activism around several issues already at the forefront of orca conservation policy.

More than 17,000 public comments were submitted to the governor's office and task force. The timing of public comments coincided to a significant degree with media coverage of events within the orca population. Through qualitative and quantitative content analysis, the Oregon State University Human Dimensions Lab analyzed public response data for two features: prominent emotions expressed and the implicit and explicit connections people were making to existing Quality of Life Vital Signs.



- \* Trend lines represent percentages of total comments received between June and December 2018: (a) responses to survey prompt Q38 "Please use this space to share any comments about the draft recommendations" (N=2488); (b) comments submitted through the Governor's website (N=3899); (c) letters and emails submitted to the Governor's office or to Task Force members (N=59).
- † Top posts returned through Twitter Advanced Search referencing "orca" and "calf" for date range June-December 2018 (N=247).
- ‡ Relative volume of searches from Google Trends referencing "orca" and "calf" in the U.S. for date range June-December 2018



"...we need to increase hatchery production. Sport fishermen have the biggest economic impact but we catch small percentage of the salmon.



"As a child I watched in awe as the orcas swam past our home each year... free and enjoying their existence. They became a part of mine."



good governance economic vitality

cultural wellbeing

sense of place

sound stewardship

"...lack of political will, foot dragging, hard-lined partisan actions against the natural world, and greed have driven the Orcas to this brink of extinction."



"As a 70 Year fisherman in Washington why should I continue to support WDFW as you continue to TAKE AWAY my fishing opportunities."



"I myself have devoted my career to wastewater treatment to address point source pollution."

\*Of 350 comments sampled, 56 (16%) had relevant content, with a total of 86 references to quality of life Vital Signs.

## **Orca Conservation and Human Wellbeing**

Of 350 randomly selected comments, 56\* contained one or more references that related to the Puget Sound Partnership Quality of Life Vital Signs. *Good Governance* was most frequently discussed in a negative tone, reflecting people's evaluation of past and current decision processes. Although not specifically prompted, about half of the references related to other indicators, reflecting mostly positive connections to *Sense of Place* and *Sound Stewardship*, and negative perceptions of impacts on *Cultural Wellbeing* and *Economic Vitality*.

## What your words are really Saying

Emotions impact perceptions and opinions, particularly during a crisis. Using the NRC Emotion Lexicon, a database of words associated with eight basic emotions, we analyzed their frequency in public responses to orca conservation. The most commonly represented emotions were trust, fear, sadness and anticipation. Based on these findings, we can take steps to address the fear and sadness evoked by the decline of Southern Resident orcas and consider how to build trust and positive perceptions of governance in the proposed restoration strategies.

