

# Future Sediment Management in the Toutle-Cowlitz river system

## Aim for Today

To initiate a meaningful discussion within the Collaborative regarding current and future sediment-related:

1. Processes
2. Issues
3. Management

## Discussion Enabling Presentations, followed by Q&A

Technical reminders/primers (5 minutes each) on how:

- a) Sediment moves through the Toutle-Cowlitz drainage system – Jon Major
- b) Sediment will be managed between now and 2035 under the Limited Reevaluation Report (LRR) - Val Ringold
- c) River science used to inform decisions on actions taken under the Sediment Management Plan<sup>1</sup> - Colin Thorne
- d) Existing efforts could be complemented by other stakeholders – Colin Thorne

## Break-out Groups followed by report back and discussion

Discussion by stakeholder groups to answer the questions:

- What is your organization's interest in this group's discussion of sediment and its management?
- If an online sediment management information hub existed, what would your institution use it for? To help guide data management sub-group, please give examples of specific uses, as well as generalities.
- What is your group's view regarding current sediment issues and their management?
- How would your group like to see stakeholders other than the Corps complementing how sediment-related issues will be managed by the Corps:
  - in the near term, under the LRR<sup>2</sup> (that is, through 2035)?
  - in the long-term, beyond what was contemplated in the current LRR (that is, beyond 2035)?

## Longer-term Goals for the Data Management sub-Group - discussion and closure

1. Establish an online sediment management information hub that will:
  - a. make sediment-related reports, journal papers and conference presentations available to stakeholders,
  - b. provide weblinks to relevant data sources (USGS, USFS, NMFS, USACE, Universities etc.), and
  - c. ensure that all stakeholders are well informed regarding sediment processes, issues and management.
2. Continue to facilitate exploration of how stakeholders might continue to contribute to envisaging a long-term sediment solution that has the aims of:
  - a. continuing to meet authorized levels of protection for ensuring public safety,
  - b. doing so in a manner that does not jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of designated critical habitat,
  - c. leveraging the potential of floodplains to trap and retain sediment, and
  - d. supporting restoration of at least some of the sediment-related, river-wetland-floodplain functions and socio-economic benefits that have been absent in the Toutle-Cowlitz system since the eruption.

<sup>1</sup> **For details see:** Sclafani, P., Nygaard, C. and Thorne, C.R. (2017) Applying Geomorphological Principles and Engineering Science to Develop a Phased Sediment Management Plan for Mount St Helens, Washington, *Earth Surface Processes and Landforms*, doi: 10.1002/esp.4277. <http://onlinelibrary.wiley.com/doi/10.1002/esp.4277/epdf>

<sup>2</sup> **NOTE:** The USACE Limited Reevaluation Report (LRR) is the USACE's plan for near term sediment management through 2035. It has now been approved and implementation has begun. USACE's authorizing document on the outcome of the LRR (the Agency Decision Document) is the 2019 Director's Report: <https://usace.contentdm.oclc.org/utils/getfile/collection/p16021coll7/id/19478> The LRR went out for public review and comment prior to finalizing. During discussion, groups should bear in mind that the LRR already accounts for the influences of stakeholders. **For details of the public consultation**, see the 2018 Report of Decision, which is part of the Director's Report: <https://usace.contentdm.oclc.org/digital/api/collection/p16021coll7/id/10590/download>