



# Early Warning Systems: What Are They?

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October 25, 2016

# DEWS Defined

“Drought early warning systems typically aim to track, assess and deliver relevant information concerning climatic, hydrologic and water supply conditions and trends. Ideally, they have both a monitoring (including impacts) component and a forecasting component. The objective is to provide timely information in advance of, or during, the early onset of drought to prompt action (via threshold triggers) within a drought risk management plan as a means of reducing potential impacts. A diligent, integrated, approach is vital for monitoring such a slow-onset hazard.” (WMO 2016 – Svoboda and Fughes)

# Early Warning Systems

- Multiple types of hazards in EWS
- DEWS least developed
- EWS must be broad enough to meet multiple needs
- Social process
- ‘End to end’
- Drought monitoring vs. drought warning

# DEWS Messages

- What is happening w/ respect to drought?
- When are impacts likely?
- Where are the locations at risk?
- Who is at risk?
- Why is the drought a threat? Why are there vulnerabilities?
- How can a DEWS be effective, both short and long term?

# What we want to learn from you today

What is: an early warning?  
a drought?

What information is needed?

Disseminate how?

Using what tools?

How frequently?

From whom?

How to build capacity in users?

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# Early Warnings and Drought

- What is an ‘early warning’?
  - How early is early enough for you/your organization?
  - With what information?
- What is considered a drought in the Intermountain West (CO, UT, WY)?
  - How can a DEWS be sensitive to this unique context?
  - Are there any ‘triggers’ that you feel are unique to this region? What are they?
  - Is there a ‘better’ working definition of drought? “A deficiency of moisture that results in adverse impacts on people, animals, or vegetation over a sizeable area” (NWS)

# What information is needed?

Hand out with various products and tools listed for ranking

# Information delivery

- What platforms or tools are used to do this?
  - Webinar, web page, newsletter, email, social media, blogs, personal contact, etc.
- How frequently are messages disseminated?
  - This varies by product, but ideally how often would you want a message?
- Who is the trusted source for DEWS?
  - NIDIS, State Clim. Offices, USDM, Drought.gov, etc.
- How to build capacity in user community?