Glen Canyon Dam Adaptive Management Work Group
Agenda Item Information
May 8th, 2013

Agenda Item
Science Update

Action Requested
None

Presenters
Jack Schmidt, Chief, Grand Canyon Monitoring and Research Center
Scott VanderKooi, acting Deputy Chief and Biology Program Manager, Grand Canyon Monitoring and Research Center

Previous Action Taken
Monitoring and research work conducted by the GCMRC is described in the FY13/14 Biennial Work Plan.

Relevant Science
Recent progress concerning on-going monitoring and research work in the Colorado River ecosystem (CRe) will be presented.

A new GCMRC website: <http://www.gcmrc.gov/discharge_qw_sediment/> makes discharge, sediment transport, sediment mass balance, and water quality monitoring data available to all users. This website will facilitate more effective monitoring of sediment inflows to the CRe during the sediment accumulation periods associated with the High Flow Experiment (HFE) Protocol.

Continued monitoring of rainbow trout allows preliminary evaluation of the effects of the November 2012 HFE on the population and condition of trout in Glen Canyon and the distribution of trout in Marble Canyon.

Background Information

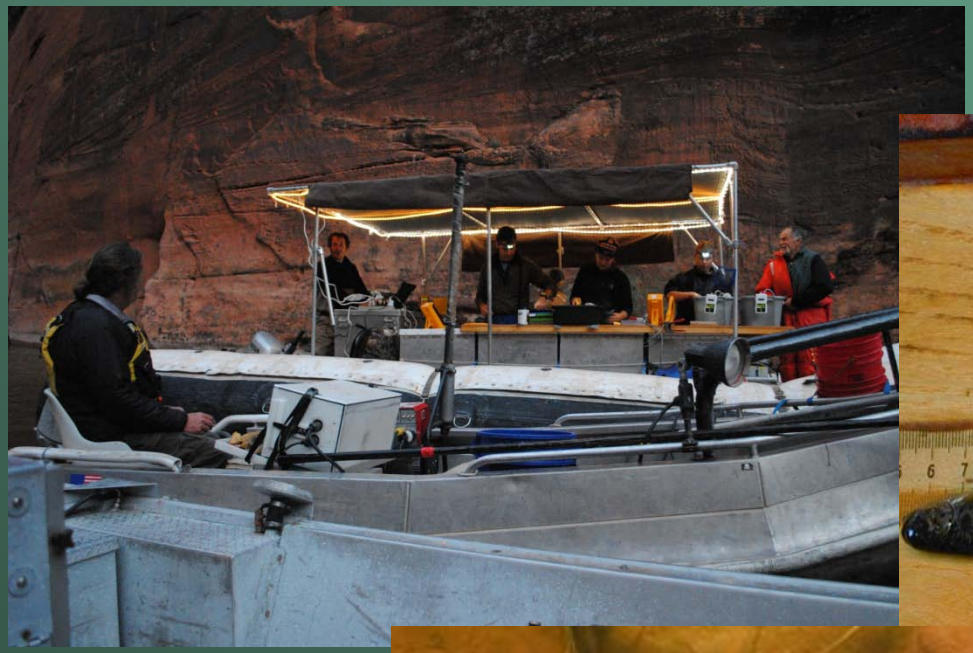
USGS
science for a changing world

GCMRC Science Update – Biology

Scott VanderKooi
Southwest Biological Science Center
Grand Canyon Monitoring and Research Center

U.S. Department of the Interior
U.S. Geological Survey

Rainbow Trout Natal Origins: Glen Canyon and Marble Canyon



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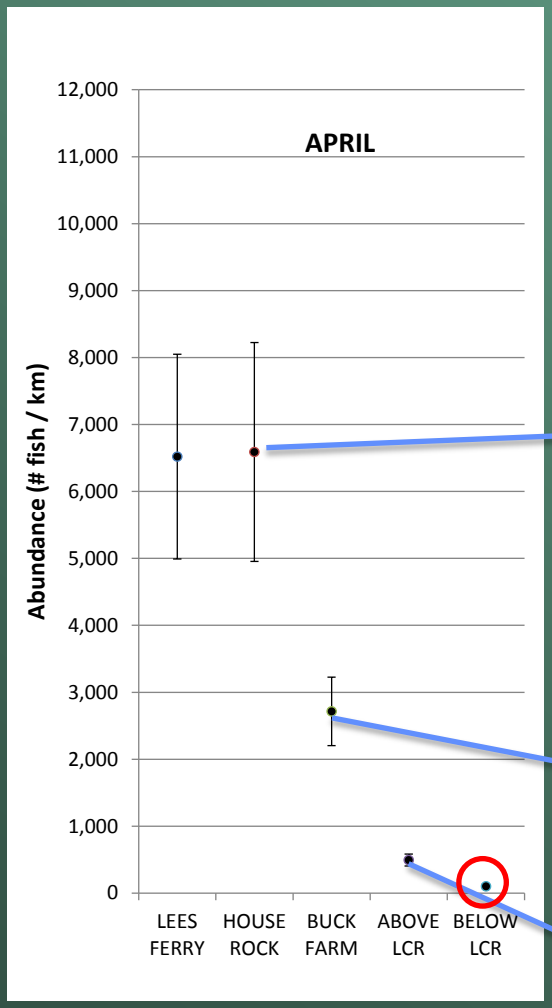
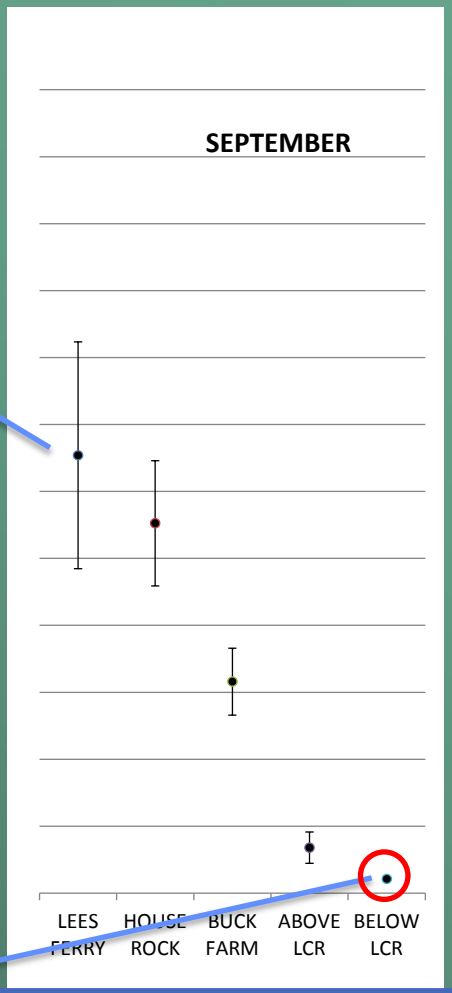
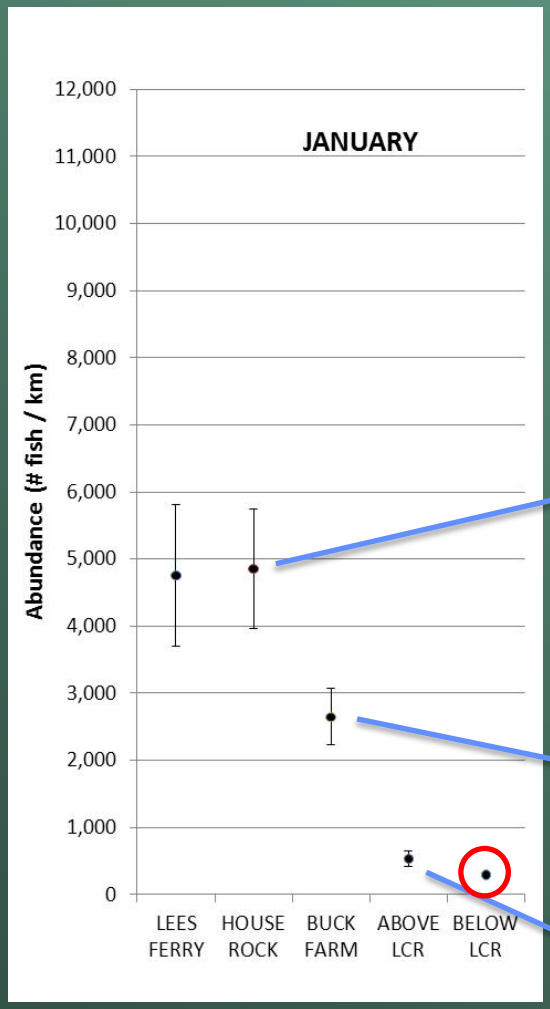


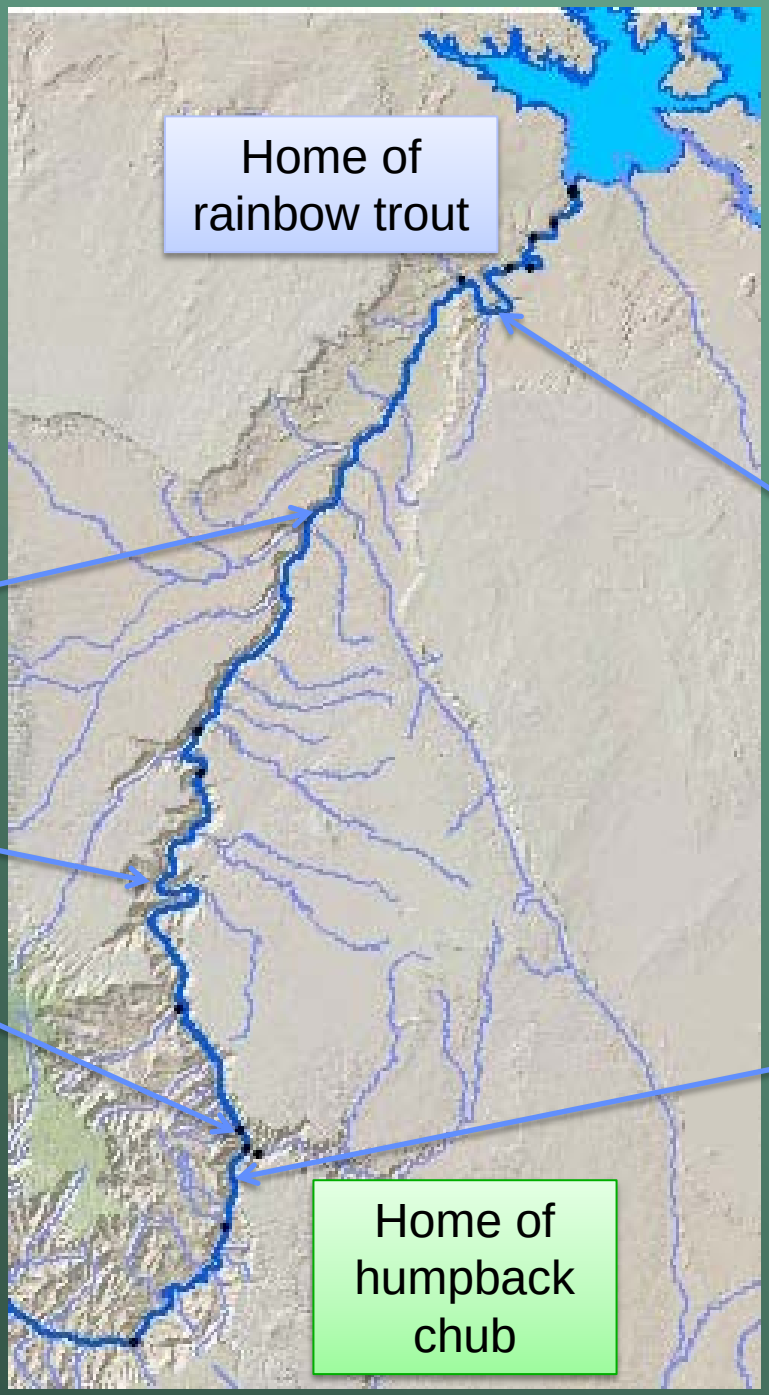


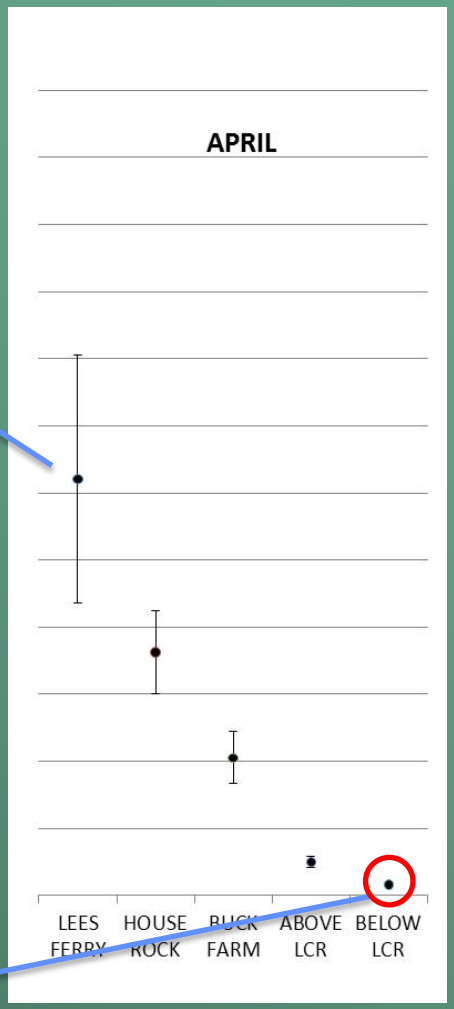
Korman and Yard 2013, unpubl. 2012 sampling data

USGS

2012: Rainbow trout populations very high in the upstream third of Marble Canyon, but very low where humpback chub live



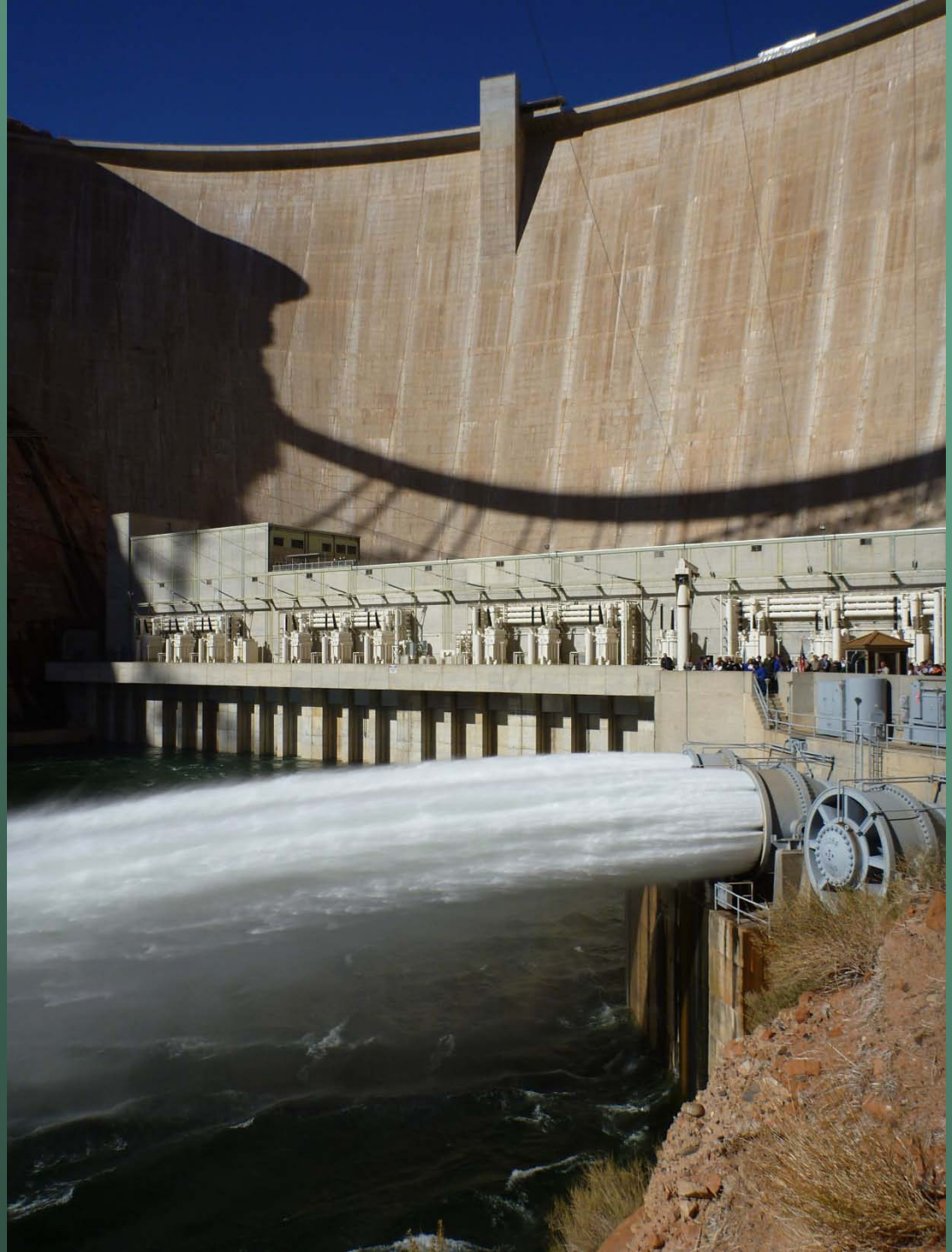




Korman and Yard 2013, unpubl. 2013 sampling data

USGS

2013: Pattern continues, rainbow trout populations very high upstream, but very low where humpback chub live



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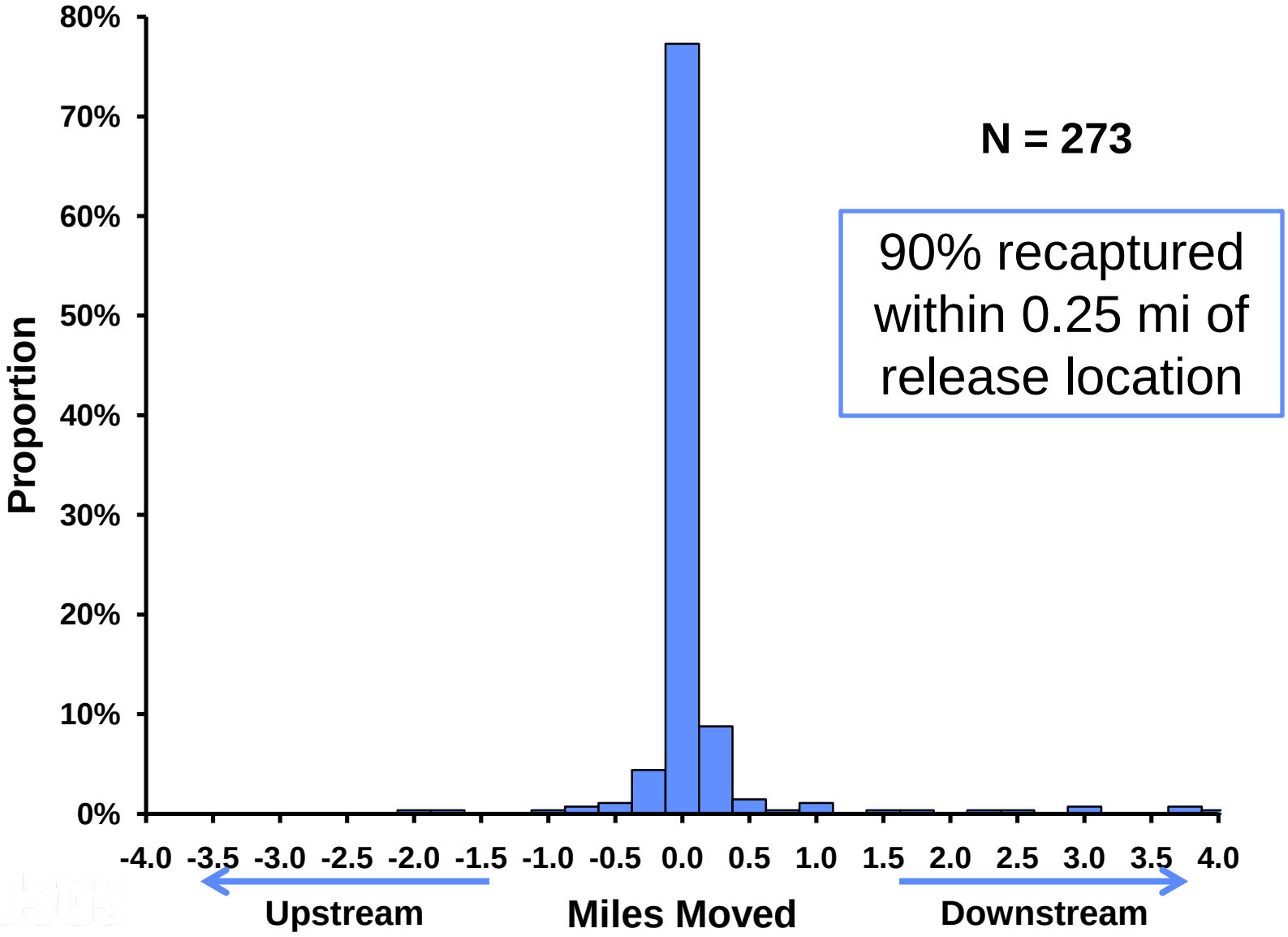
Age-0 Rainbow Trout Movement in Glen Canyon: October to December 2012



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(Preliminary Data from Korman and Yard 2013, Unpublished)