

# FY 2009 RESEARCH PROBLEM STATEMENT

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## TITLE

Determination of Relatively Permanent Streams or Fish Passage Design Flows in Oregon

## PROBLEM (Description of need)

Under the jurisdiction of the Clean Water Act, the Rapanos guidance changes the classification of streams and wetlands. In particular, headwater streams that were once considered intermittent and perennial are grouped into 1 category and are considered jurisdictional or "relatively permanent". Ephemeral streams are considered "non-relatively permanent". The cut-off point is based on continuity and duration of flow (e.g., a stream is considered "relatively permanent" if it flows seasonally, approx. 90 days or more).

## PROPOSED RESEARCH, DEVELOPMENT OR TECHNOLOGY TRANSFER ACTIVITY

Currently, ODOT must evaluate permanence of flow at a particular stream site on a case-by-case basis, often based on a single site visit and no reliable knowledge of flow conditions throughout the year. Developing a map of relatively-permanent streams in Oregon would assist ODOT in identifying streams under the jurisdiction of the Clean Water Act and provide valuable information for determining priorities, thus saving time and resources. The study would identify logical hydrologic clusters and locations of temporary monitoring sites at the start of the project. The map and methods would be in USGS StreamStats.

## BENEFITS

The new classification has tremendous implications for ODOT management and regulation of water resources. Permanence of flow and classification of streams have bearing on monitoring and methods of assessing water quality, application of water quality standards and determination of appropriate use designations, and whether there is authority under the Clean Water Act to regulate water quality.

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