

# 2010 Drought Update

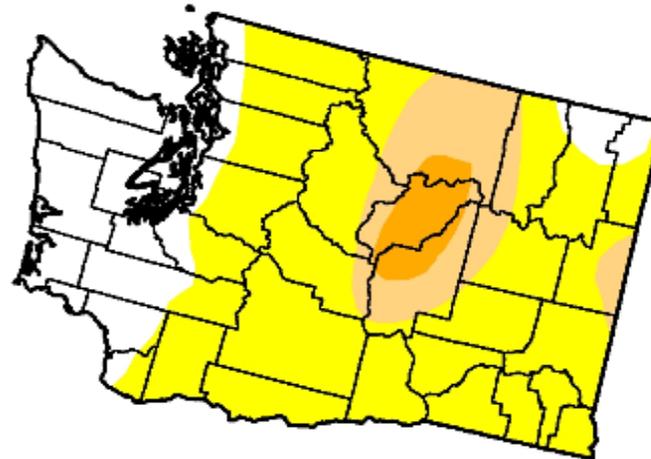
## U.S. Drought Monitor Washington

March 2, 2010

Valid 7 a.m. EST

Drought Conditions (Percent Area)

|   | None | D0-D4 | D1-D4 | D2-D4 | D3-D4 | D4  |
|---|------|-------|-------|-------|-------|-----|
| Current                                       | 23.4 | 76.6  | 16.4  | 3.9   | 0.0   | 0.0 |
| Last Week<br>(02/23/2010 map)                 | 23.4 | 76.6  | 17.0  | 5.5   | 0.0   | 0.0 |
| 3 Months Ago<br>(12/08/2009 map)              | 43.5 | 56.5  | 17.5  | 7.8   | 0.0   | 0.0 |
| Start of<br>Calendar Year<br>(01/05/2010 map) | 43.5 | 56.5  | 17.5  | 7.8   | 0.0   | 0.0 |
| Start of<br>Water Year<br>(10/06/2009 map)    | 0.0  | 100.0 | 30.5  | 9.7   | 0.0   | 0.0 |
| One Year Ago<br>(03/03/2009 map)              | 50.9 | 49.1  | 0.0   | 0.0   | 0.0   | 0.0 |



Intensity:

- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements

<http://drought.unl.edu/dm>



Released Thursday, March 4, 2010

Author: R. Tinker, CPC/NOAA

by  
Ken Slattery  
Water Resources Program Manager

# There is No Funding for a Drought Response

- On March 1<sup>st</sup>, Governor Gregoire's office asked the Legislature to set aside \$4.24 million for drought relief projects.
- *"We do not have the resources necessary should this drought continue out."*
  - Governor Gregoire

# Western Perspective

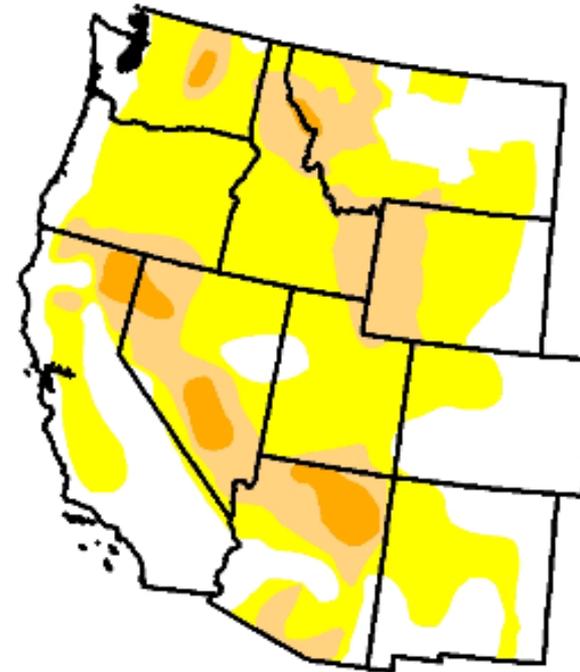
## U.S. Drought Monitor West

March 2, 2010  
Valid 7 a.m. EST

Drought Conditions (Percent Area)

|   | None | D0-D4 | D1-D4 | D2-D4 | D3-D4 | D4  |
|---|------|-------|-------|-------|-------|-----|
| Current                                       | 34.9 | 65.1  | 21.1  | 3.8   | 0.0   | 0.0 |
| Last Week<br>(02/23/2010 map)                 | 34.1 | 65.9  | 21.6  | 3.9   | 0.0   | 0.0 |
| 3 Months Ago<br>(12/08/2009 map)              | 44.4 | 55.6  | 28.7  | 11.6  | 0.5   | 0.0 |
| Start of<br>Calendar Year<br>(01/05/2010 map) | 40.1 | 59.9  | 30.6  | 9.9   | 0.5   | 0.0 |
| Start of<br>Water Year<br>(10/06/2009 map)    | 42.1 | 57.9  | 25.4  | 8.5   | 0.0   | 0.0 |
| One Year Ago<br>(03/03/2009 map)              | 35.1 | 64.9  | 28.0  | 8.0   | 0.6   | 0.0 |

Intensity:



*The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements*

<http://drought.unl.edu/dm>



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## RCW 43.83B.400

- As used in this chapter, "drought condition" means that the water supply for a geographical area or for a significant portion of a geographical area is **below seventy-five percent of normal** and the water shortage is likely to create **undue hardships** for various water uses and users.

## **RCW 90.86.030**

(1) The joint legislative committee on water supply during drought shall convene from time to time at the call of the chair when a drought conditions order under RCW 43.83B.405 is in effect, or when the chair determines, in consultation with the department of ecology, that it is likely that such an order will be issued within the next year.

(4) The committee from time to time shall make recommendations to the senate and house of representatives on budgetary and legislative actions that will improve the state's drought response programs and planning.

# How We Got Here: El Nino

- Moderate to strong El Nino developed in late 2009
- Pacific Northwest experienced typical El Nino response in 2010 (warmer and dryer conditions)
- Warmer and dryer than normal January
  - Below average precipitation and due to warmer than normal temperatures, more precipitation fell as rain than normal
- Warmer and dryer than normal February
  - Noticeable lack of typical amount of snow at lower elevations
- Warmer and dryer than normal March so far
  - El Nino expected to persist: warmer and dryer than normal conditions expected through spring

# Steps to a Drought Declaration

- Convene the Water Supply Availability Committee (WSAC)
  - Makes the call on <75% of supply
- Based on WSAC information, Governor's Office convenes the Executive Water Emergency Committee (EWEC)
  - Makes the call on undue hardship
- Ecology director can declare areas in drought with the written approval of the Governor.
- Agencies develop programs for addressing various drought related issues.

# Where are We Now?

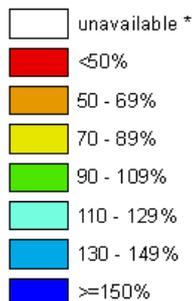
- WSAC convened February 18<sup>th</sup>
- Joint WSAC and EWEC convened March 5<sup>th</sup>
  - No clear indications of undue hardship at that time.
  - Next joint meeting scheduled for March 18<sup>th</sup>
- Fish passage, flow and habitat problems likely in many streams in summer and fall.
- Small water systems could have problems with wells and diversions in summer and fall.
- On March 10, Bureau of Reclamation forecasted proratable users in Yakima Basin will receive 77% of entitlements, but this could decline based on expected weather conditions.

# Where are We Now?

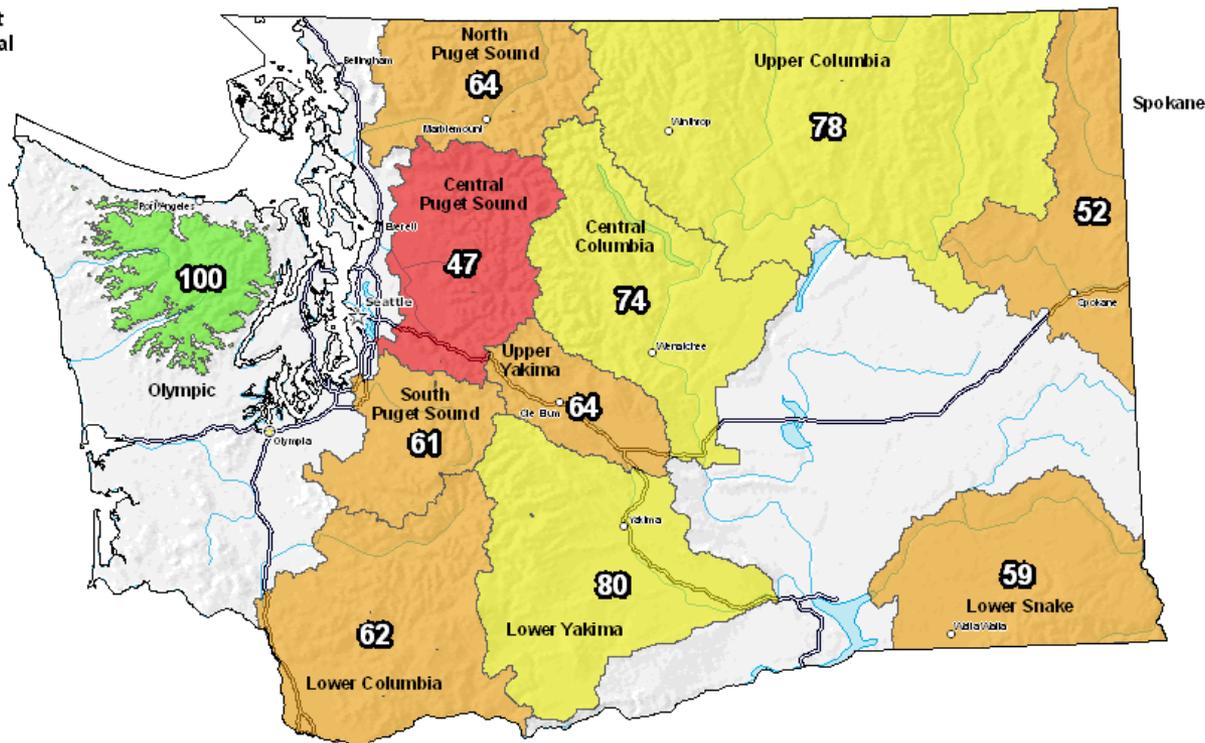
## Washington SNOTEL Current Snow Water Equivalent (SWE) % of Normal

Mar 10, 2010

Current Snow Water Equivalent (SWE) Basin-wide Percent of 1971-2000 Normal



\* Data unavailable at time of posting or measurement is not representative at this time of year



Provisional Data  
Subject to Revision



The snow water equivalent percent of normal represents the current snowwater equivalent found at selected SNOTEL sites in or near the basin compared to the average value for those sites on this day. Data based on the first reading of the day (typically 00:00).



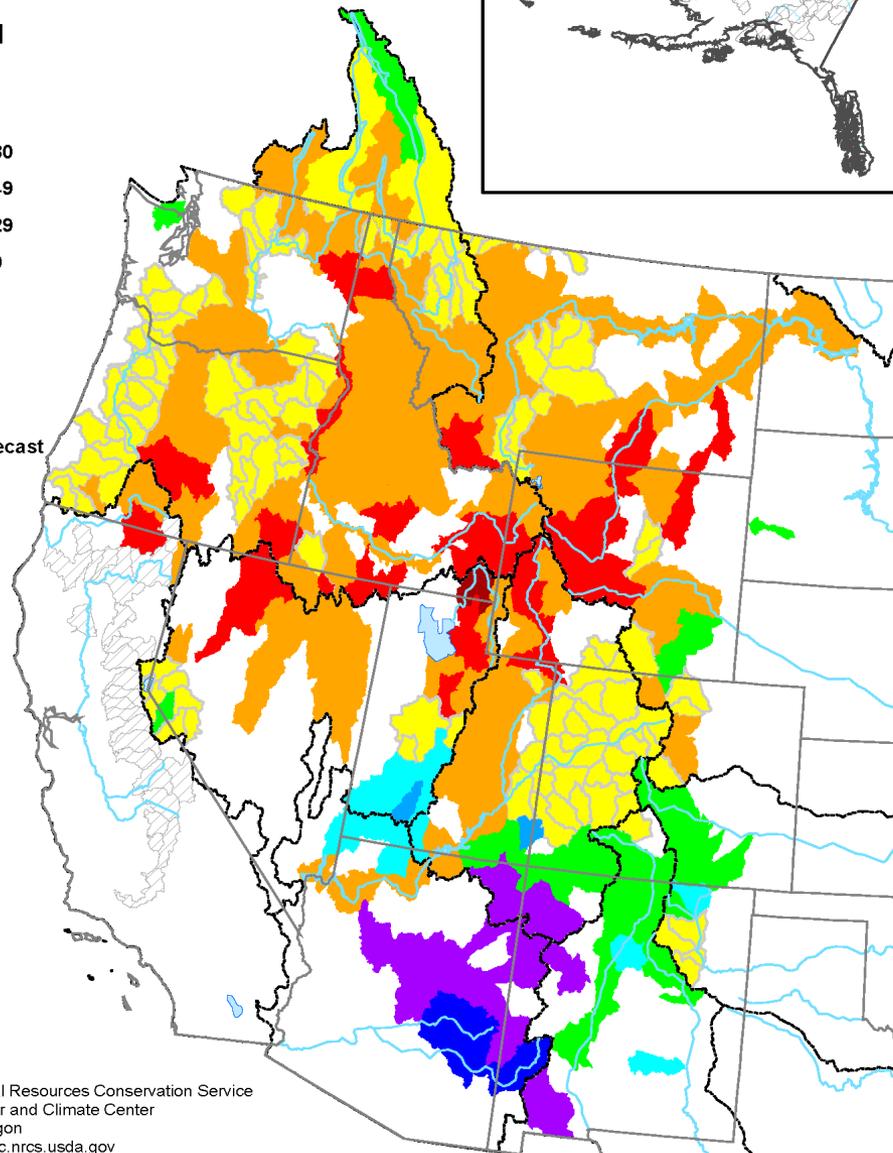
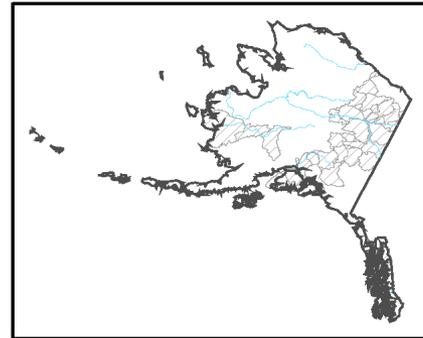
Prepared by the USDA/NRCS National Water and Climate Center  
Portland, Oregon <http://www.wcc.nrcs.usda.gov/gis/>  
Based on data from <http://www.wcc.nrcs.usda.gov/reports/>  
Science contact: Tom Pagano@por.usda.gov 503 414 3010

# Where are We Likely Going?

| <b>Basin</b>             | <b>% of Average Snow Water Equivalent (SWE) SNOTEL data</b> | <b>% of Average Precipitation</b> | <b>% of Average Forecasted Streamflow</b> |
|--------------------------|---|-----------------------------------|---|
| <b>Olympic</b>           | <b>100</b>  | <b>141</b>                        | <b>92-97</b>                              |
| <b>Lower Yakima</b>      | <b>80</b>   | <b>82</b>                         | <b>63-81</b>                              |
| <b>Upper Columbia</b>    | <b>78</b>   | <b>82</b>                         | <b>64-83</b>                              |
| <b>Central Columbia</b>  | <b>74</b>   | <b>77</b>                         | <b>63-76</b>                              |
| <b>Walla Walla</b>       | <b>66</b>   | <b>71</b>                         | <b>70-71</b>                              |
| <b>Upper Yakima</b>      | <b>64</b>   | <b>72</b>                         | <b>50-66</b>                              |
| <b>North Puget Sound</b> | <b>64</b>   | <b>91</b>                         | <b>77-85</b>                              |
| <b>Lower Columbia</b>    | <b>62</b>   | <b>77</b>                         | <b>66-76</b>                              |
| <b>South Puget Sound</b> | <b>61</b>   | <b>73</b>                         | <b>65-75</b>                              |
| <b>Lower Snake</b>       | <b>59</b>   | <b>64</b>                         | <b>56-77</b>                              |
| <b>Spokane</b>           | <b>52</b>   | <b>62</b>                         | <b>44-70</b>                              |
| <b>Cent. Puget Sound</b> | <b>47</b>   | <b>73</b>                         | <b>60-72</b>                              |

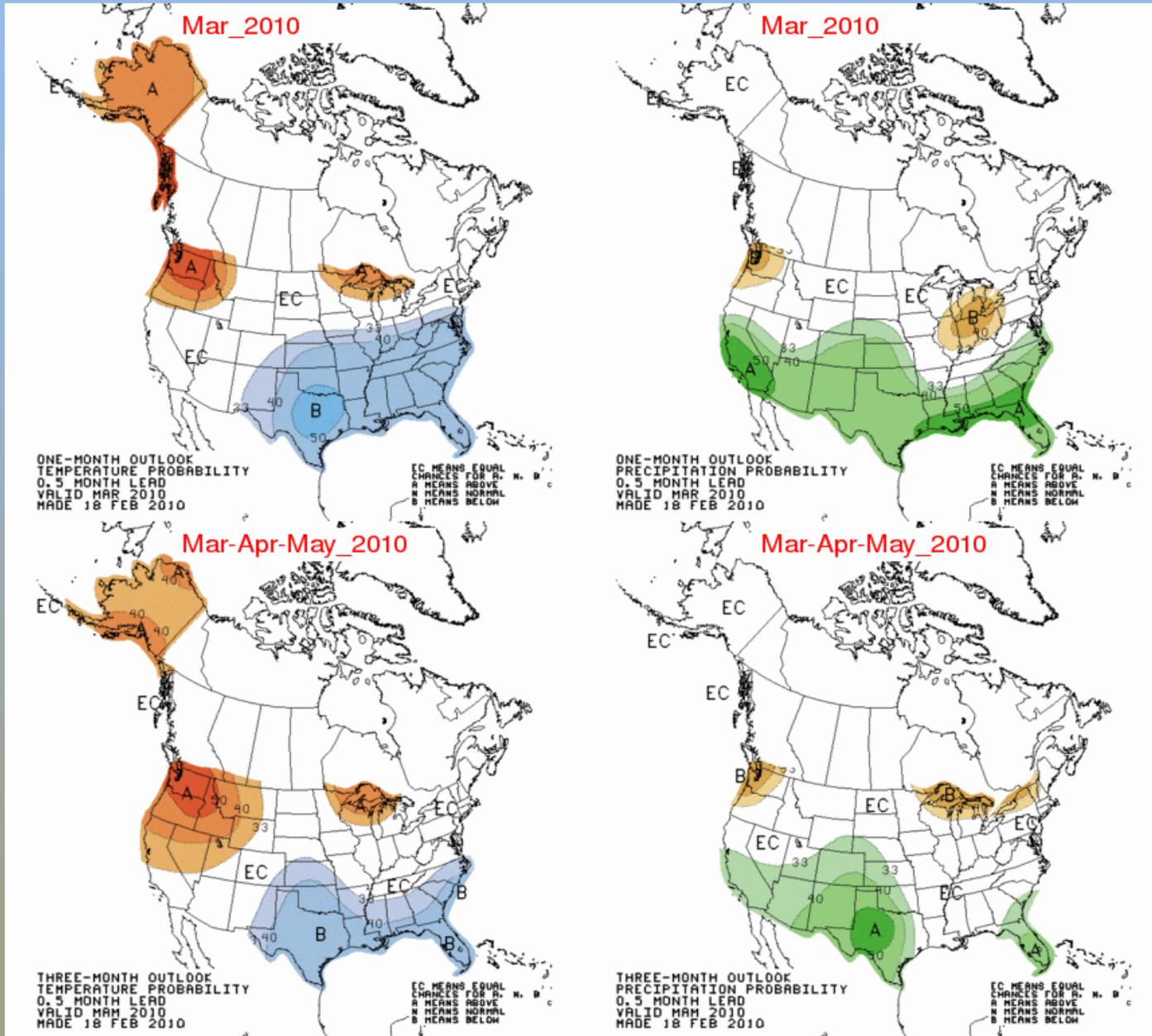
**Average is 1971-2000. Snow Water Equivalent (SWE) SNOTEL and precipitation data was current March 10th. Streamflow forecasts were issued March 5th, current to March 1st.**

# Spring and Summer Streamflow Forecasts as of March 1, 2010



Prepared by  
USDA, Natural Resources Conservation Service  
National Water and Climate Center  
Portland, Oregon  
<http://www.wcc.nrcs.usda.gov>

# Drought Outlook



# Next Steps

- Continuous monitoring of weather and runoff conditions (runoff forecasts will be updated twice a month).
- Twice monthly meetings of WSAC/EWEC to consider recommendations on possible drought declaration.
- Keep Legislative Drought Committee apprised.
- Larger water supply utilities believe they should be able to get by without extraordinary measures.
- DOH will watch for emergent problems with water systems.
- WDFW expects fish and wildlife will have difficulty and may need some special measures in some areas of the state in the summer and fall.
- Ecology will not need to regulate conditioned water rights on the main stem Columbia but likely will on several Columbia River tributaries.

# Next Steps

- Ecology is working on the contents of a possible emergency rule and guidance for distributing drought funds in the event of a declaration.
- No drought relief funding is currently available in Ecology's budget but \$4.24 million has been requested by the Governor/OFM.
  - Would only be used if a drought is declared within the area(s) in which the declaration is effective and only the extent required to prevent or relieve effects on agriculture, water supplies and fish and wildlife.



STATE OF WASHINGTON

OFFICE OF FINANCIAL MANAGEMENT

*Insurance Building, PO Box 43113 • Olympia, Washington 98504-3113 • (360) 902-0555*

March 1, 2010

**TO:** The Honorable Kelli Linville  
The Honorable Margarita Prentice

**FROM:** Victor A. Moore  
Director

A handwritten signature in black ink, appearing to read "V.A. Moore".

**SUBJECT: FUNDING FOR 2010 EMERGENCY DROUGHT RESPONSE PROGRAM**

I am writing to request an amendment to the 2010 supplemental operating budget to provide an additional \$4.2 million in dedicated account funding for a 2010 emergency drought response.

The Governor's budget does not include funding dedicated to drought relief because it was not an item we could foresee last fall. With snowpack levels in much of the Cascade Mountain range at 25 percent or more below average, our state's agriculture, municipal water supplies, and fish and wildlife will be at significant risk from water shortage. As you know, past droughts have caused serious economic losses.

State and federal agencies continue to monitor conditions and will advise the Governor and the interagency Water Emergency Committee if a declaration of drought emergency is needed anywhere in the state. If a declaration is made, drought relief funding will be needed to activate a grant program at the Department of Ecology. The grants will be provided to qualifying public entities for a range of actions, including buying and leasing water, drilling emergency wells, and constructing or improving water supply distribution and delivery facilities.

I am requesting the following 2010 supplemental operating budget changes:

- Transfer \$4.0 million from the Disaster Response Account-State to the State Drought Preparedness Account;
- Appropriate \$4.0 million from the State Drought Preparedness Account-State; and
- Appropriate \$240,000 from the State Emergency Water Projects Revolving Account-State.

Thank you for your consideration. We have sent language to your fiscal committee staff under separate cover. If you have any questions, please contact Kirstan Arestad of my staff at 902-0569.

**cc:** The Honorable Gary Alexander  
The Honorable Joseph Zarelli  
The Honorable Lisa Brown  
The Honorable Frank Chopp  
Owen Rowe, House Ways & Means Committee  
Maria Hovde, Senate Ways & Means Committee  
Ted Sturdevant, Department of Ecology  
Marty Brown, Office of the Governor  
Kirstan Arestad, Office of Financial Management