California Water Plan

Regional Outreach Workshop:

North Coast Hydrologic Region

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Department of Water Resources
Northern District
Chief, Land and Water Use Section

Fortuna
October 11, 2007
Area: 19,500 sq. miles (12.3% of State)

Avg. Annual Precipitation: 50.6 inches (State Avg. 23 inches)

Y2K Population: 644,000 (0.02% of State)

Y2K Irrigated Crop Area: 327,000 acres (0.03% of State)
North Coast Hydrologic Region
Land and Water Use

Data Source: DWR ND 1996 to Present Land and Water Use Data
### North Coast Hydrologic Region

**Water Entering – Water Leaving = Change in Storage**

<table>
<thead>
<tr>
<th></th>
<th>1998 (154%)</th>
<th>2000 (98%)</th>
<th>2001 (60%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Water Entering the Region</strong></td>
<td>81 MAF</td>
<td>52 MAF</td>
<td>32 MAF</td>
</tr>
<tr>
<td><strong>Water Leaving the Region</strong></td>
<td>80 MAF</td>
<td>52 MAF</td>
<td>33 MAF</td>
</tr>
<tr>
<td><strong>Storage Changes in the Region</strong></td>
<td>1 MAF</td>
<td>0 MAF</td>
<td>-1 MAF</td>
</tr>
</tbody>
</table>
### North Coast Region Applied Water Uses For Water Years 1998, 2000, 2001

<table>
<thead>
<tr>
<th></th>
<th>1998</th>
<th>2000</th>
<th>2001</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(154%)</td>
<td>(98%)</td>
<td>(60%)</td>
</tr>
<tr>
<td><strong>Urban</strong></td>
<td>140</td>
<td>150</td>
<td>149</td>
</tr>
<tr>
<td><strong>Irrigated Agriculture</strong></td>
<td>659</td>
<td>806</td>
<td>633</td>
</tr>
<tr>
<td><strong>Wild &amp; Scenic R.</strong></td>
<td>30,923</td>
<td>17,321</td>
<td>6,548</td>
</tr>
<tr>
<td><strong>Instream Flow</strong></td>
<td>1,445</td>
<td>1,445</td>
<td>1,474</td>
</tr>
<tr>
<td><strong>Req Delta Outflow</strong></td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Managed Wetlands</strong></td>
<td>391</td>
<td>424</td>
<td>254</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>33.5 TAF</td>
<td>20 TAF</td>
<td>9 TAF</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Local Projects</th>
<th>Colorado Project</th>
<th>Federal Projects</th>
<th>State Project</th>
<th>Ground Water</th>
<th>Reuse &amp; Recycle</th>
<th>Dedicated Environ</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>540</td>
<td>0</td>
<td>335</td>
<td>0</td>
<td>264</td>
<td>232</td>
<td>32,188</td>
</tr>
<tr>
<td>2000</td>
<td>596</td>
<td>0</td>
<td>409</td>
<td>0</td>
<td>335</td>
<td>223</td>
<td>18,584</td>
</tr>
<tr>
<td>2001</td>
<td>358</td>
<td>0</td>
<td>238</td>
<td>0</td>
<td>453</td>
<td>74</td>
<td>7,934</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Dedicated Environ</th>
<th>Increase/Decrease</th>
<th>TAF</th>
</tr>
</thead>
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<tr>
<td>1998</td>
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</table>
Groundwater Development
Statistics
## Number of North Coast Well Completion Reports by Use

<table>
<thead>
<tr>
<th>Well Use</th>
<th>Del Norte</th>
<th>Humboldt</th>
<th>Siskiyou</th>
<th>Trinity</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic</td>
<td>1,356</td>
<td>1,874</td>
<td>5,974</td>
<td>1,377</td>
<td>10,581</td>
</tr>
<tr>
<td>Irrigation</td>
<td>74</td>
<td>193</td>
<td>703</td>
<td>21</td>
<td>991</td>
</tr>
<tr>
<td>Municipal, Industrial &amp; Public</td>
<td>60</td>
<td>211</td>
<td>138</td>
<td>59</td>
<td>468</td>
</tr>
<tr>
<td>Monitoring</td>
<td>173</td>
<td>1,317</td>
<td>624</td>
<td>162</td>
<td>2,276</td>
</tr>
<tr>
<td>Other</td>
<td>82</td>
<td>318</td>
<td>462</td>
<td>81</td>
<td>943</td>
</tr>
<tr>
<td><strong>Totals:</strong></td>
<td><strong>1,745</strong></td>
<td><strong>3,913</strong></td>
<td><strong>7,901</strong></td>
<td><strong>1,700</strong></td>
<td><strong>15,259</strong></td>
</tr>
</tbody>
</table>

[Image of well completion reports and well equipment]
Groundwater Level Data & Information

Water Data Library: (http://wdl.water.ca.gov/)

Water Data Library - Home
Welcome to the Department of Water Resources Water Data Library (WDL) home.

Select from one of the following data modules:
- Water Quality Data
- Groundwater Level Data
- Surface Water Data
- Climatology Data (Prototype)
- Climatology Data (New Development Site - Coming Soon)

Groundwater Level Data, 04N01W21B0001H
Your selection returned a total of 42 records. Wells in the Department of Water Resources monitoring networks are identified by a six-digit Well Number, which is based on the Public Land Survey System. The table headings and records contain several codes and acronyms. Press the New Search or Nearby Search buttons or at the bottom of the page to begin a new data retrieval. Data for this well can also be downloaded in XML, CSV, or Text delimited format.

Water Levels, 04N01W21B0001H
Gamma Plain
- Elevation = 88
- Depth to water below land surface, Foot

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Map Interface for Groundwater Levels

DWR Water Data Library

Groundwater Data & Information
Water Supply Issues

- General Plans & land use planning – *Sufficient water for proposed development ??*
- Drought resiliency on Klamath
- Trinity River operations
- Small groundwater basins
- Financial limitations
Water Quality Issues

- Land Use and Develop increase on WQ impacts on water supply
- Septic tank failures
- Erosion and runoff
- Groundwater salinity intrusion
- EPA drinking water standards
- Protection of Water Supplies from Transportation Corridor
Environmental Water Issues

- Endangered Species Act impacts on water supply (Coho and Suckers); Operation, maintaining existing, and development of new water supplies.

- Klamath & Trinity Rivers fishery populations and habitat
Flood Protection Issues

- Floodplain construction w/ general public picking up the tab.
- Need for Safe Harbor agreements
- Living with hydrologic uncertainty vs. concrete and rebar control; or somewhere in between?
Water Management Issues

- Water Users opting out of State Watermaster Service
- Disadvantaged areas’ fiscal inability to manage system resources.
- Federal vs. State vs. County vs. District vs. NGO vs. no control.
- Like Rest of State; AG/ M&I / Environ confrontations reign in the region.
Looking to the Future

- Regional water treatment
- Groundwater development investigations
- Klamath River Solution
- Save Our Scott & Shasta
- Trinity River Fish & Wildlife Management Program
- Russian River Action Plan implementation
- County General Plans
- Watershed Groups