Drought Indicator Wells

- Ground water levels are a measure of the amount of water stored in the subsurface that is available to discharge to surface water features

- 48 wells with a 30 year average record, records range from 6 to 63 years long

- 18 wells monitored by USGS
  - Automatic recorders, hourly data, satellite "real-time" access to measurements

- 30 wells monitored by DWR
  - Automatic recorders, hourly data, downloaded quarterly (Feb, May, Aug & Nov)

- Several “new” wells are currently being monitored and will fill some of the large geographic gaps in the current network
Drought Indicator Wells
Current conditions tab on www.ncdrought.org
Recent Ground Water Impacts

- Drought tends to lower the water levels in the surficial or water table aquifer.
- Near the border between Washington, Beaufort & Hyde Counties concerned farmers increased irrigation withdrawals to save their crops and have lowered ground water levels in the Castle Hayne aquifer.
- Home wells nearby, which make use of suction pumps, failed because they can not continue to provide water when levels fall below about 25 feet – the pumps lose prime.
- DWR is currently investigating the area and accounting for all the large water users and homes affected.
Are the withdrawals sustainable?
Are the withdrawals causing adverse impacts?
Is salt water encroachment a concern?