Water Rights Workshop

Oklahoma Governor's Water Conference & Research Symposium
October 26-27, 2010

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Water Rights Workshop Outline

- What will be covered?
  - Water Law
    - Introduction to OWRB & Planning and Management Division
    - Brief look at the OCWP and how water rights tie into the planning process
    - Groundwater & Stream (Surface) Water
    - Permitting Process and Timelines
  - Applications
    - Types of Water Right Applications
    - What is required to be submitted with the applications
    - How to fill out the application forms
  - After a Permit is Obtained
    - When should you file an amendment
    - Common mistakes permit holders make
    - How to fill out water use reports
  - Questions after each section?

Oklahoma Water Resources Board

Mission:

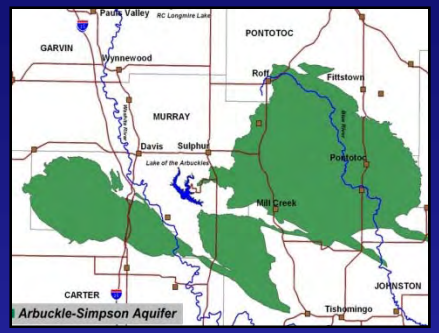
...to manage and protect the water resources of the state and plan for Oklahoma's long-range water needs in a responsive, innovative and professional manner to ensure that all Oklahomans have adequate quantities of good water.

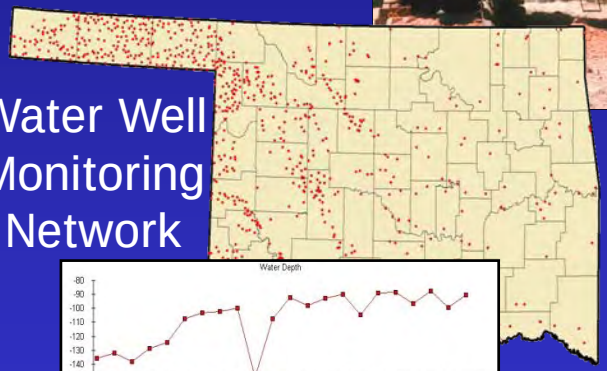
Organization:

- 9-Member Board of Directors appointed by Governor define water policy and conduct State's water business
- 3 Functional Divisions:
  - Water Quality Division
  - Planning & Management Division
  - Financial Assistance Division

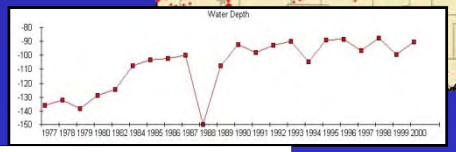
Planning & Management Division

- Hydrologic/hydrogeologic Studies
- Well Drillers Licensing: drillers/pump installers of water, geothermal, observation, monitoring wells
- Water Well Level Monitoring Network
- Interstate Stream Compacts: Coordinates Oklahoma's participation in four interstate stream compacts
- National Flood Insurance Program
- State Dam Safety Program





Water Well Monitoring Network



Planning & Management Division

Water Rights Administration

Key Function of the OWRB…

- Application processing & permit issuance for the use of surface and groundwater
- Stream water forfeiture analysis
- Compliance and Enforcement
- Annual use reporting
- Max. Annual Yield Studies
- Allocation Modeling/Geospatial mapping

~2,500 stream water use permits on file, appropriate 2.4 million ac-ft/year

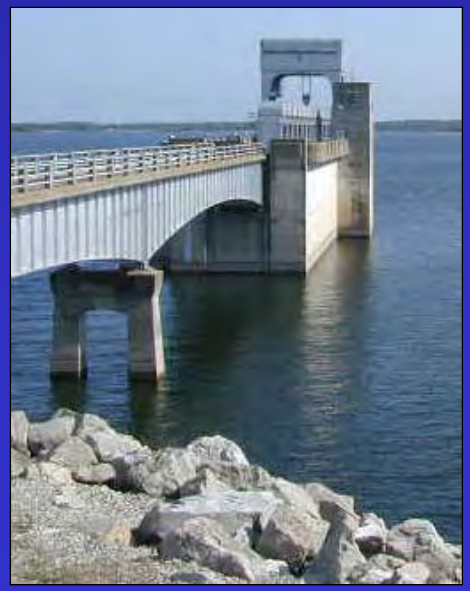
~10,600 groundwater permits, allocate 3.2 million ac-ft/year

Planning & Management Division
Water Resource Planning

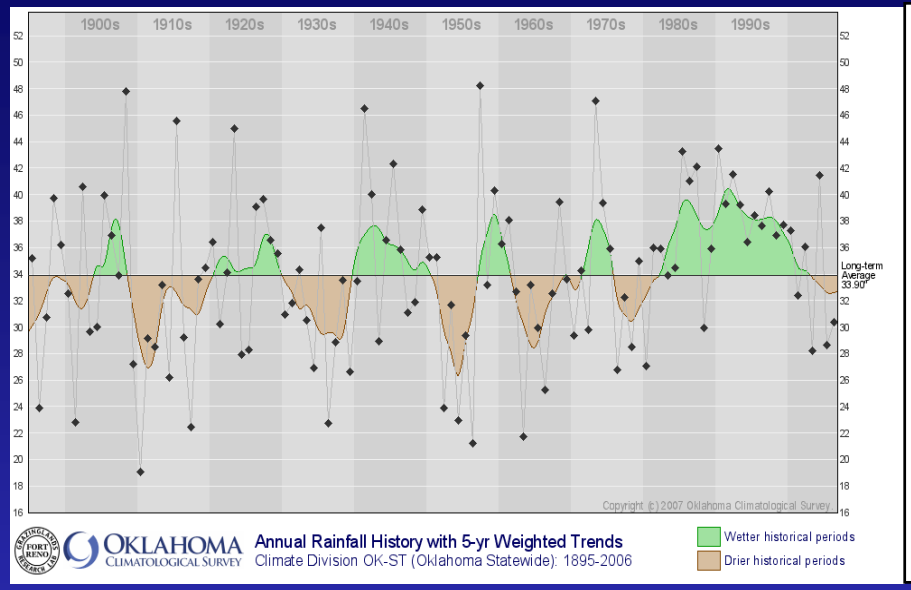
- Plan for and encourage the use of water resources in a manner that will best serve the many needs of Oklahomans
- Maintain the *Oklahoma Comprehensive Water Plan*, a long-range strategy for managing and developing the state's water resources
- 2012 Update—Supply/demand projections and Water policy recommendations

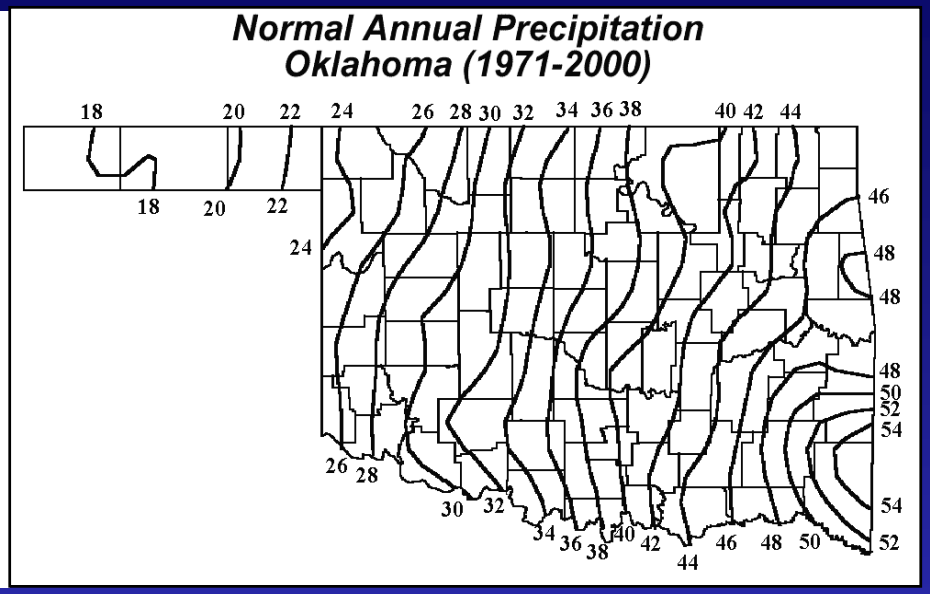
Meeting Oklahoma's future water supply challenges…

- Climate variability
- Population growth
- Future water needs
- Competing water interests
- Water and wastewater infrastructure costs
- Vulnerability to drought/flooding
- Environmental protection
- Economic development

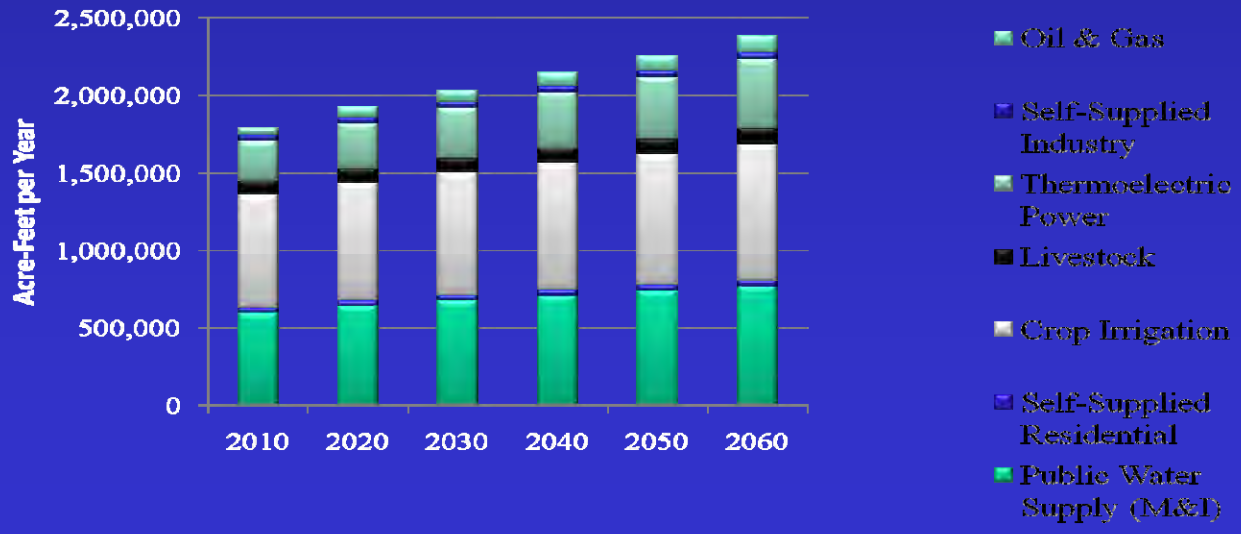


Annual Trends in Statewide Averaged Rainfall (1895 Through 2006)





Demand Projections by Use



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Planning for the Future

Planning and Water Rights – What is needed?

- Knowledge
  - How much water is being used?
  - Where is the water being used?
  - How is water availability calculated?
  - How much water is available for future use?
  - Where is there surplus water?
  - Where are the areas with little available water?
  - Protection of the water quality

Water Use Permitting in Oklahoma

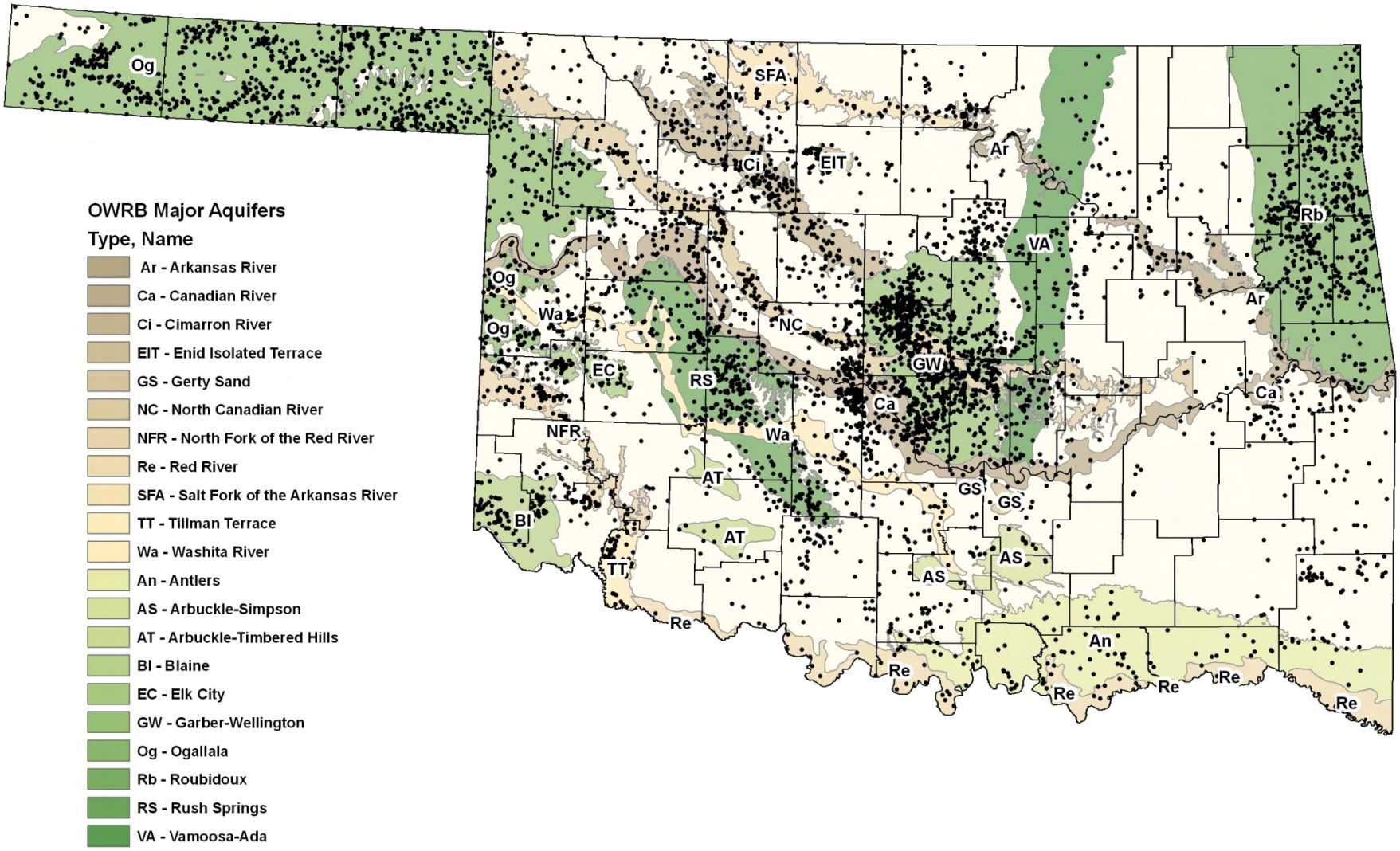
- Groundwater:
  - fresh water under the surface of the earth regardless of the geologic structure in which it is standing or moving outside the cut banks of any definite stream
- Stream Water:
  - water in a “definite stream” (a watercourse in a definite, natural channel, with defined beds and banks, originating from a definite source or sources of supply);
  - may be intermittent or irregular flow
- Domestic/household uses exempt
- <u>No priority of uses for Groundwater</u>

Water Use Permitting in Oklahoma

- Domestic Use of Water:
  - ...for household purposes, for farm and domestic animals up to the normal grazing capacity of the land whether or not the animals are actually owned by such natural individual or family, and for the irrigation of land not exceeding a total of 3 acres in area for the growing of gardens, orchards and lawns.
  - ...for agriculture purposes;
  - ...for fire protection;
  - ...by non-household entities for drinking water purposes, restroom use, and the watering of lawns
    - not to exceed 5 acre-feet per year

Locations of Reported Groundwater Wells

Prior to 1972 - (6,035 Wells)



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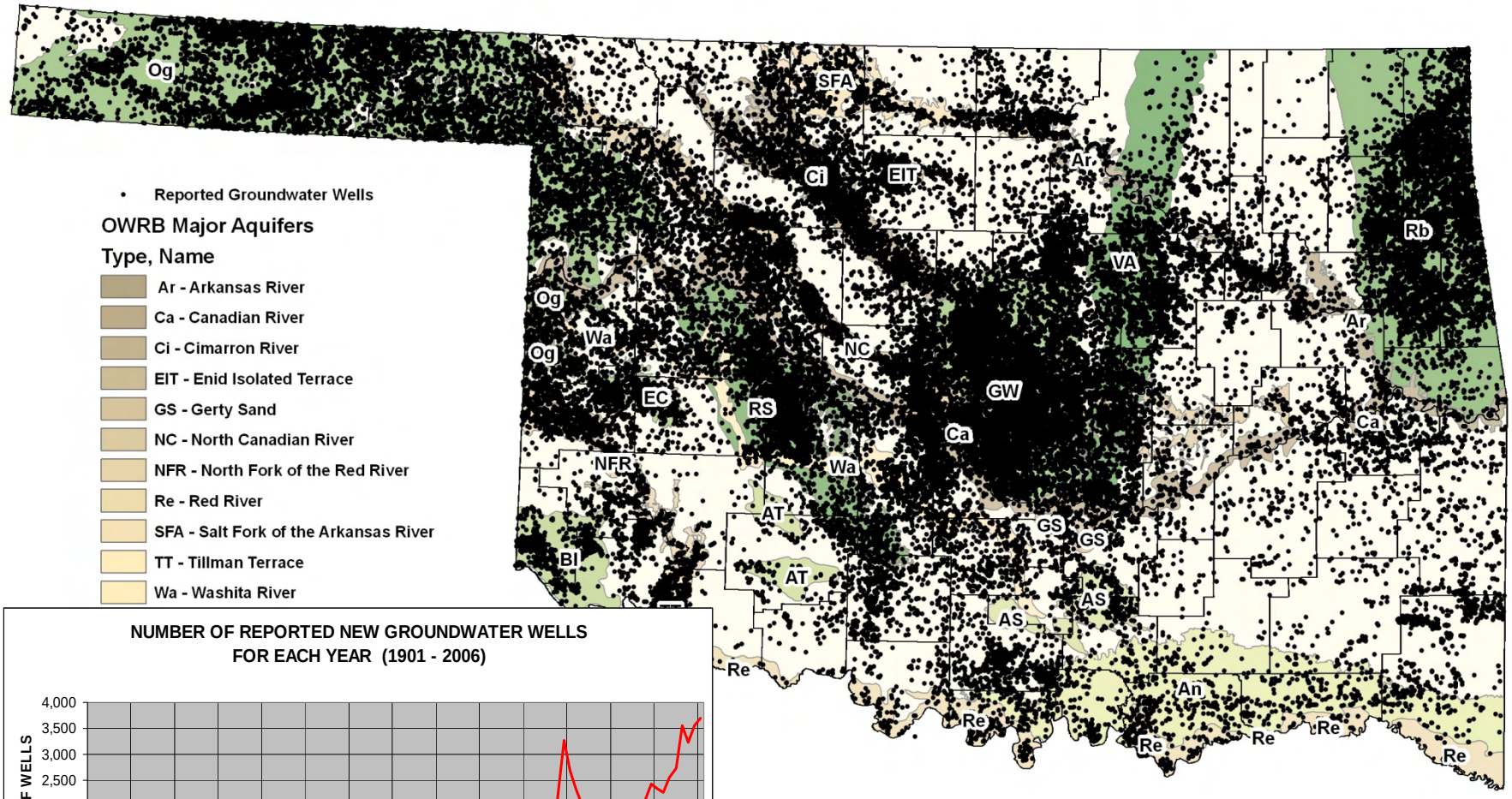
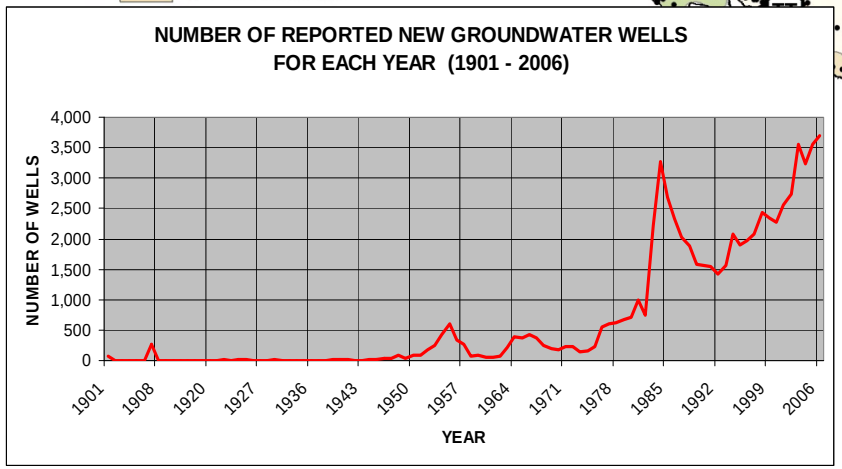
Locations of Reported Groundwater Wells

as of October 24, 2010 (~132,500 wells)





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Oklahoma's Water Resources

- "Reported" Annual Withdrawals (OWRB, 2008):
  - State Total Water Use = 1,529,730 ac-ft
    - Surface Water = 801,247 ac-ft
    - Groundwater = 728,483 ac-ft
  - State Public Water Supply (Total) = 463,266 ac-ft
  - Irrigation (Total) = 766,110 ac-ft

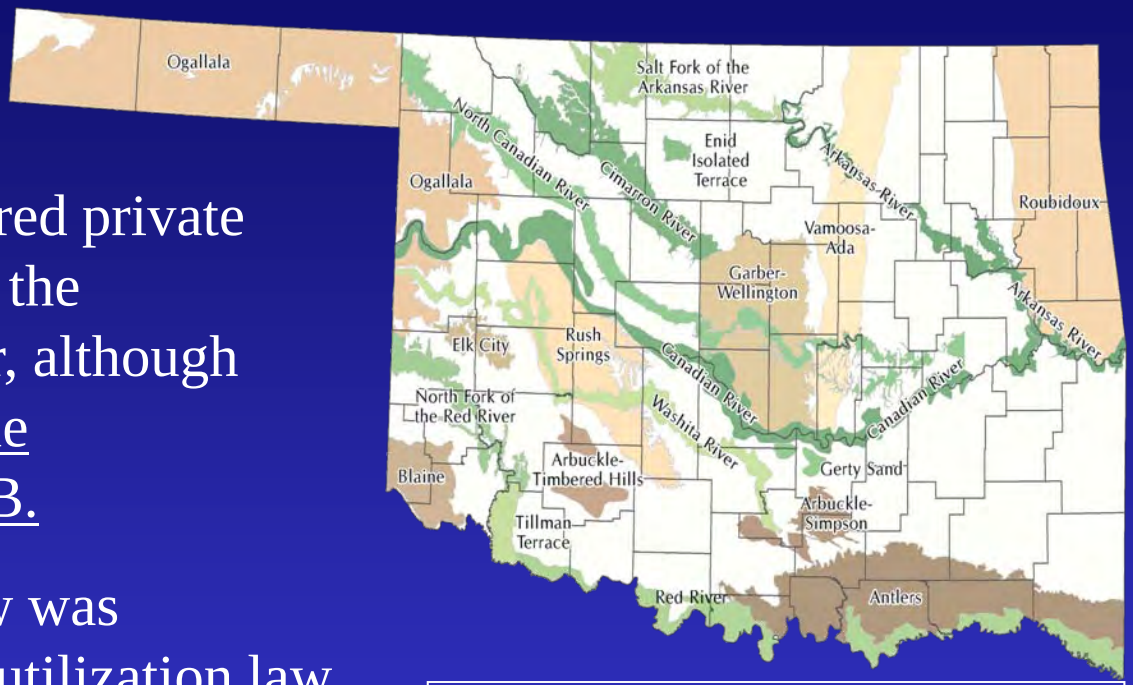
Irrigation accounts for ~72% of groundwater withdrawals

Oklahoma Groundwater Law

Groundwater is considered private property that belongs to the overlying surface owner, although it is subject to reasonable regulation by the OWRB.

Current groundwater law was established in 1973 as a utilization law.

- Created for economic development
- Mining law that allows for the depletion of the resource



23 major groundwater aquifers store ~320 million a.f. of water

10,500 groundwater permits allocate ~3.2 million a.f./year

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Groundwater Availability Determinations

- The amount of groundwater apportioned is based upon the amount of land owned or leased, generally two acre-feet of water per acre of land (Statute):
  - slightly more or less in basins where detailed hydrologic surveys have been conducted

    (currently range from 0.5 acre-feet/acre in the Enid Isolated Terrace up to 2.1 acre-feet/acre in the Antlers Sandstone)

    - Spacing requirement from existing wells **only** in basins where the hydrologic survey has been completed (1,320 feet in bedrock and 660 feet in alluvium & terrace aquifers). No spacing for all other basins.
    - No priority in types of uses (*Oklahoma Water Resources Board v. Texas County Irrigation and Water Resources Ass'n, Inc*., 1984 OK 96)
    - Metering of wells can only be required "Upon request of a majority of the landowners residing within a basin" (82 O.S. 1020.19))

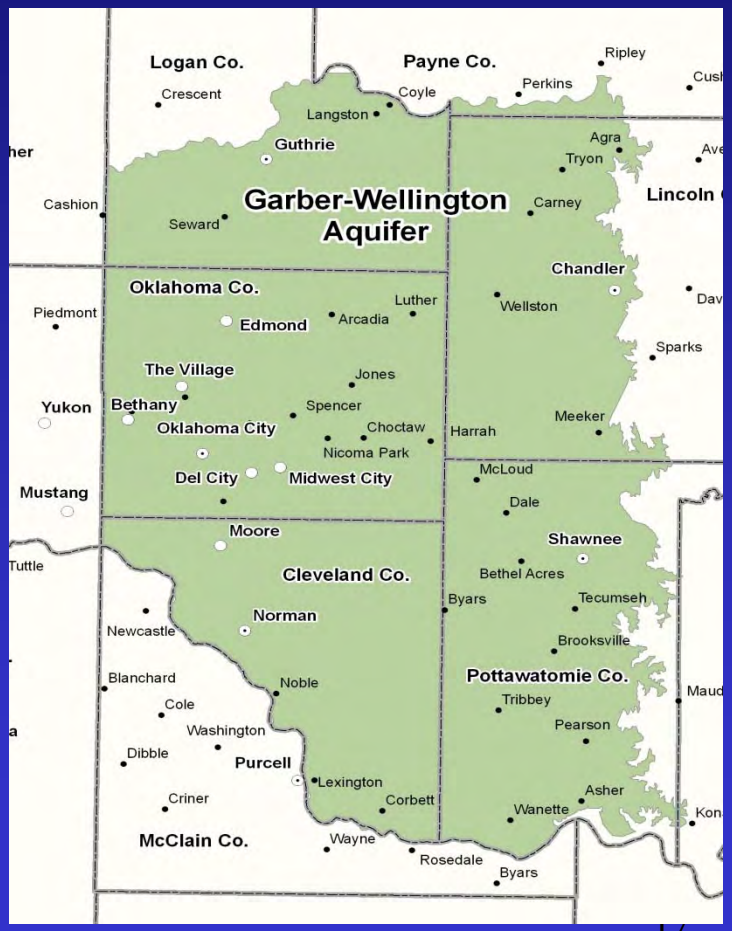
Reasonable Regulation- Maximum Annual Yield

For Permitting Purposes, law considers the entire basin…

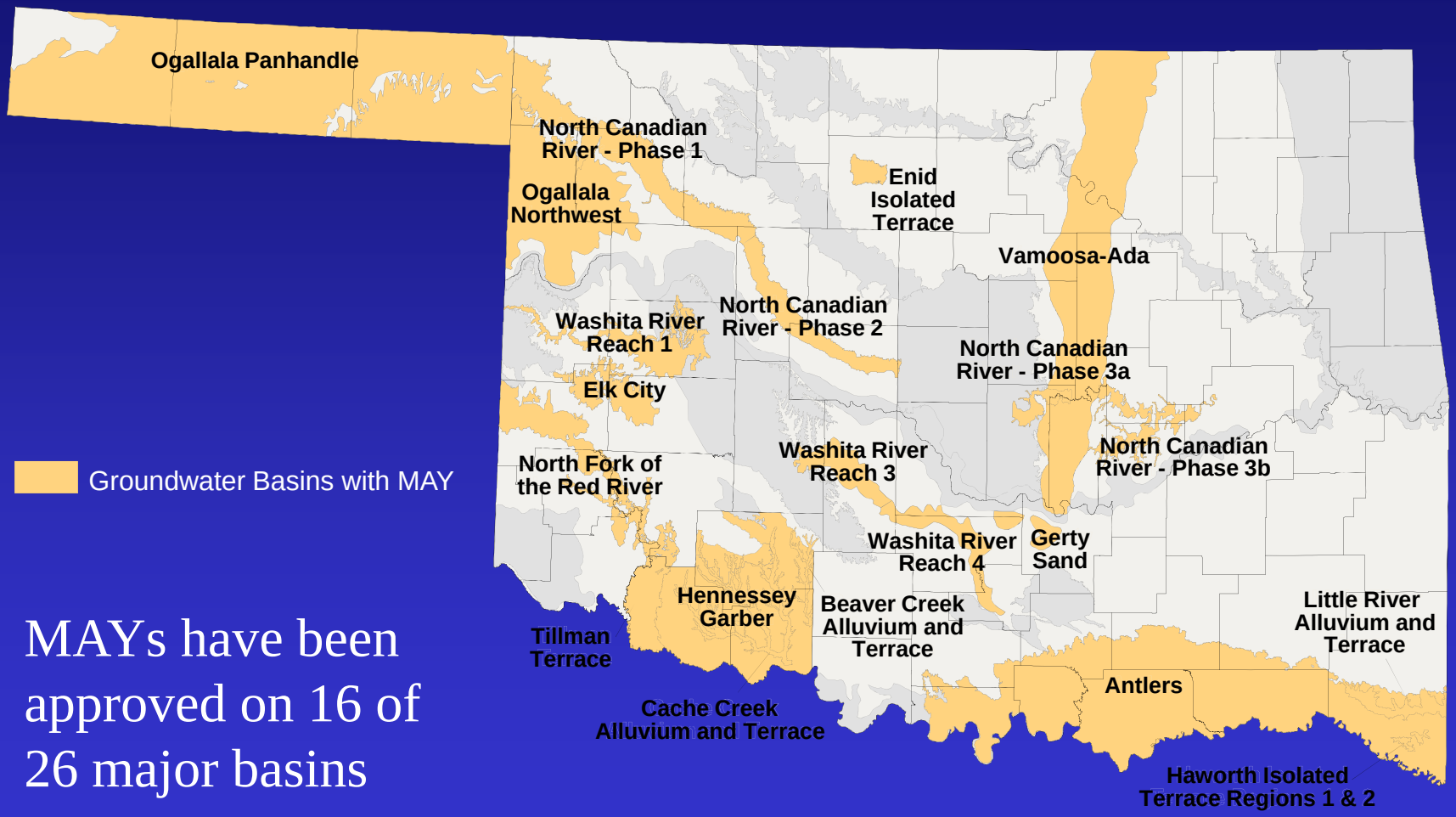
Question we must answer is: <u>How much water is available per acre of land?</u>

Max. Annual Yield (MAY) is a determination by the Board of the total amount of fresh groundwater that can be produced from a basin or subbasin allowing a min. 20-year life.

<u>"Equal Proportionate Share"</u>: Each land owner has right to share of MAY <u>equal</u> to his/her ownership of land over the basin.



Groundwater Availability Determinations



MAYs have been approved on 16 of 26 major basins

Groundwater Allocation

In Basins with MAYs:

- Regular Permits are issued based on MAY approved by OWRB
- Total water permitted =

  Equal Proportionate Share x # acres dedicated land

In Basins without MAYs:

- Temporary Permits are issued until a hydrologic study is completed and a MAY is approved by OWRB
- Total water permitted = 2 af/acre x # acres dedicated land

Overview of Groundwater Permitting

If the Board finds that these four points of law have been met,

"…then the Board shall approve the application and issue the appropriate permit."

Four Points of Groundwater Law:

1. The applicant owns or leases the land from which the water will be withdrawn
2. The dedicated land overlies a groundwater basin
3. The water will be put to a beneficial use
4. Waste of the water will not occur

Four Points of Groundwater Law

4. Waste of water will not occur.

Two types of waste considered:

1. Waste by pollution-

Board may consider...

- manner and method of…applicant's uses of fresh groundwater;
- …well and water distribution system;
- history and incidents of permitting or causing pollution…or failure to properly plug abandoned…wells…;
- and anything else that tends to prove that the applicant will or will not cause or allow groundwater pollution

If the activity for the use of water is required by ODEQ or ODAFF, Board shall be precluded from making waste by pollution determination

Four Points of Groundwater Law

4. Waste of water will not occur.

2. Waste by Depletion- Board considers evidence concerning the…

- manner and method of use proposed
- efficiency of system proposed
- history and incidents of past waste and applicant's response thereto; and
- amount of groundwater needed for proposed purpose in relation to the amount allocated to the land dedicated to the application

To ensure waste…will not occur…Board may impose conditions on the use of the groundwater

Senate Bill 288

Protection of the Arbuckle-Simpson Aquifer

- Senate Bill 288:
  - Passed by State Legislature in May 2003
  - Imposes moratorium on the issuance of any temporary groundwater permit for municipal or public water supply use outside of any county that overlays a “sensitive sole source groundwater basin.”
  - Prohibits municipal/political subdivisions outside the basin from entering into contracts for use of water (applies to both pending applications and revalidation of existing temporary permits).
  - Moratorium remains in effect until the OWRB completes the Arbuckle-Simpson study and approves a maximum annual yield that will not reduce the natural flow of water from springs or streams emanating from the aquifer.

Overview
Oklahoma Stream Water Law

- Stream water is considered to be publicly-owned and subject to appropriation by the OWRB:
  - water use permits approved by 9-member Water Board
  - Applies to water in a “definite stream”

- Prior Appropriation State
  - “First in time, first in right”:
    - first person to apply for the water right establishes a right superior to later appropriators
- “Beneficial use is basis and limit of the appropriation right”
  - Use must be justified

Overview
Oklahoma Stream Water Law

- Five Points of Stream Water Law:
  - unappropriated water is available in amount applied for
  - there is a present or future need for the water
  - the use is beneficial
  - use will not interfere with domestic or existing uses
  - use will not interfere with uses within stream system of origin

Overview
Oklahoma Stream Water Law

- Beneficial use is basis and limit
- Avoid speculation in Stream Water Rights (before permit is issued):
  - Specify use in application
  - Present or future need (785:20-5-5)
  - Out of stream system use must protect reasonably foreseeable future use in stream system (50-year)
  - Out of state use must be approved by the Oklahoma Legislature

Overview
Oklahoma Stream Water Law

- Avoiding speculation (after permit issued):
  - Commence project (within 2 years);
  - Completion of works (7 years);
  - If use is from a Federal reservoir, must enter into a contract for storage with the USACE (within 2 years);
  - Forfeiture use-it-or-lose-it (7-year default):
    - requires full use of the annually authorized amount within 7 years of permit issuance and at least once in any continuous 7-year period thereafter;
    - Schedule of Use (exception for large projects) allows phased-in use over a specified period of time (lose if fail to keep schedule)

Stream Water Calculations

- Is there water available at the proposed diversion point in the amount needed?
  - Calculations based on average annual runoff over the watershed above proposed diversion point (ArcInfo Watershed Model)
  - All appropriations, estimated domestic uses (6 acre-feet per 160 acres of drainage), and reservoir dependable yields are subtracted out
- Will the proposed diversion interfere with downstream domestic uses and prior appropriations?
  - All downstream appropriations and domestic uses on the stream from the proposed diversion point to the next major tributary are subtracted off of the determined flow at the diversion point
  - Additional drainage below the diversion point may be looked at if needed to determine if interference is likely to occur

Stream Water Calculations

- Is there available water within the stream system (out of stream system use)?
  - Available water in the stream system determined using the Est. Available Water from either the “Hydrologic Investigation of the Arkansas River Basin”, January 1998, or the “Hydrologic Investigation of the Red River Basin”, July 1998 minus all appropriations in the stream system and reservoir dependable yields
  - Must ensure enough water to satisfy the needs of the stream system of origin for a minimum of 50 years
  - Out-of-State use must be approved by Oklahoma Legislature

Water Permitting Process

- Applications are received in our office and applicant is notified of any corrections needed
- Once application is deemed complete, notice is prepared by OWRB staff and mailed to applicant with instructions
    - Protest deadline stated in notice
- If no protest is received, application is sent to the next Board meeting (total time ~3 months from submittal to approval)
- Protested applications
    - Mediation
    - Notice of Hearing sent to all parties scheduling hearing
    - Proposed order prepared by hearing examiner, mailed to all parties, and presented to the Board
    - Total time from submittal to Board vote can take 6 months or more

Notice of Application

- Groundwater:
  - Copy of notice must be mailed by certified mail to all surface landowners within 1,320 feet of proposed well locations;
  - publish notice in county where wells will be located;
- Stream Water
  - Publish notice in county of diversion and immediate downstream county
- Notice publication is one time each week for two consecutive weeks in paper of general circulation within county
- Limited quantity (15 af or less) require less notice
  - GW – surface owners within 660 ft; SW – publication notice only one week
- Amendment applications to add wells may not require notice in certain circumstances

After Board Action

- Final approvals/denials of the Board may be appealed to District court within 30 days of Board action
- Groundwater permit holders are required to drill proposed wells within 1 year of permit issuance
  - Extensions of time may be requested
- Stream Water permit holders are required to commence works within 2 years and complete works within 7 years
  - If the full authorized amount is not used in any year during a 7 year consecutive period or as allowed by a schedule of use, the permit is subject to reduction or cancellation
- All water right holders are required to file annual water use reports
- All application and permit files are imaged and are available to the public upon request

After Board Action

- Water rights may be transferred to a new owner as long as the right is in good standing
- Groundwater permits issued in basins where a study has not been conducted (temporary permits) are converted to regular permits at a set equal proportionate share once a study is complete
- Stream water rights may be subject to reduction or cancellation depending on use
- Permits issued based on lease agreement may be cancelled when lease expires
- Permits may be cancelled for failure to commence or complete works
- Field verification may be performed by OWRB staff
- Proven interference issues may be subject to changes in permit conditions and/or civil law suits from complainants
- Permit may be amended to add wells, land, water, change use, or change area of use
  - Similar notice requirements for amendments
- Prior Rights may only be amended to add wells, change use, or change area of use (cannot add water)

Online Data

- Rules
- Applications
- Forms
- Well logs
- Publications
- Reports
- WIMS (Water Information Management System)
  - GIS based interactive mapping system
  - Can obtain general permit, stream, aquifer, well log, etc. information
  - Create maps and view aerials

www.owrb.ok.gov

Water Right Staff

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Angie Taylor – Groundwater

Lindy Clay – Groundwater

Pat Kirkpatrick – Change of Ownerships & 90-day Provisional Temporary Permits

Mary Nell Brueggen – Administrative Programs Officer

Questions?