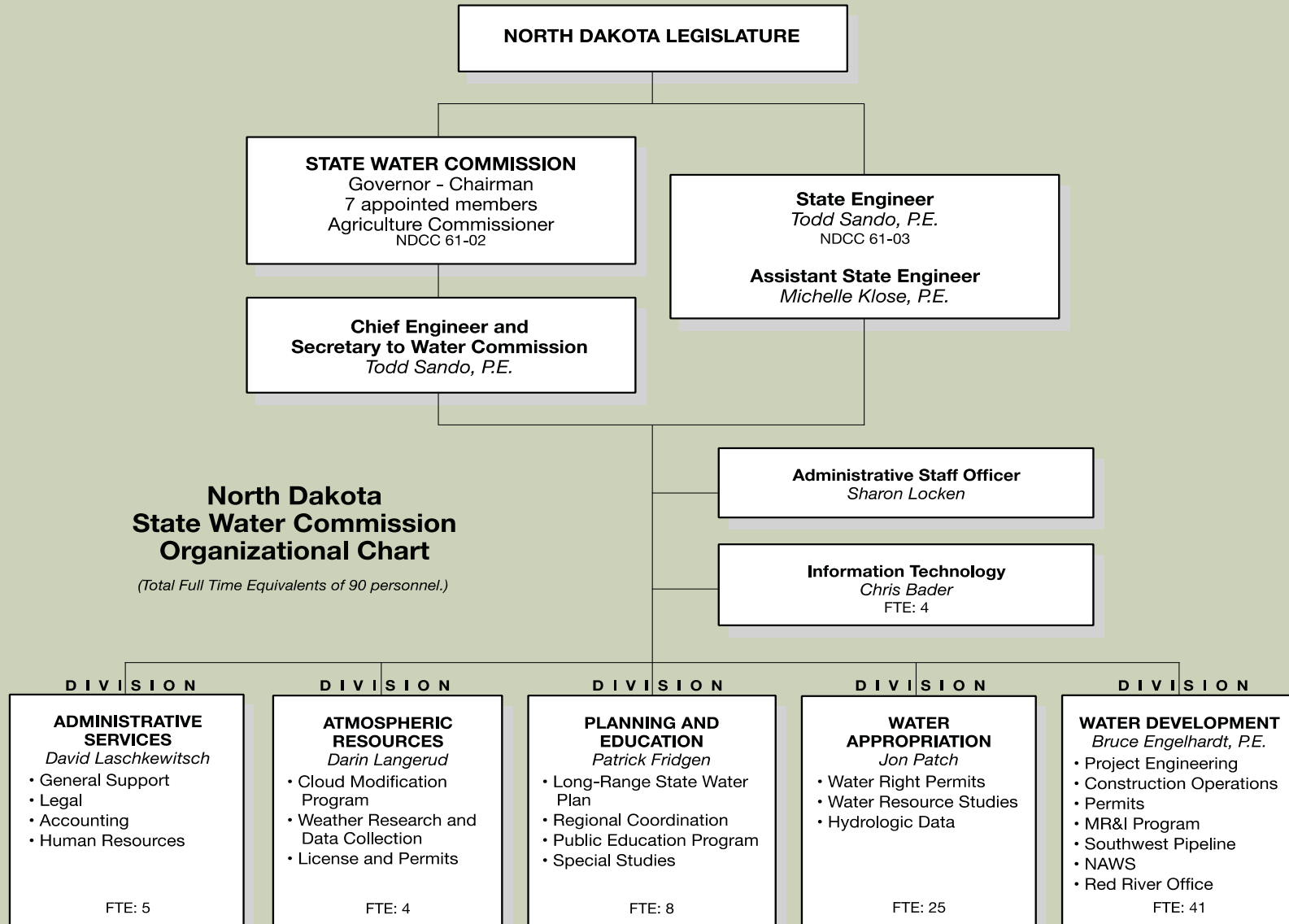


NORTH DAKOTA WATER RIGHTS ADMINISTRATION

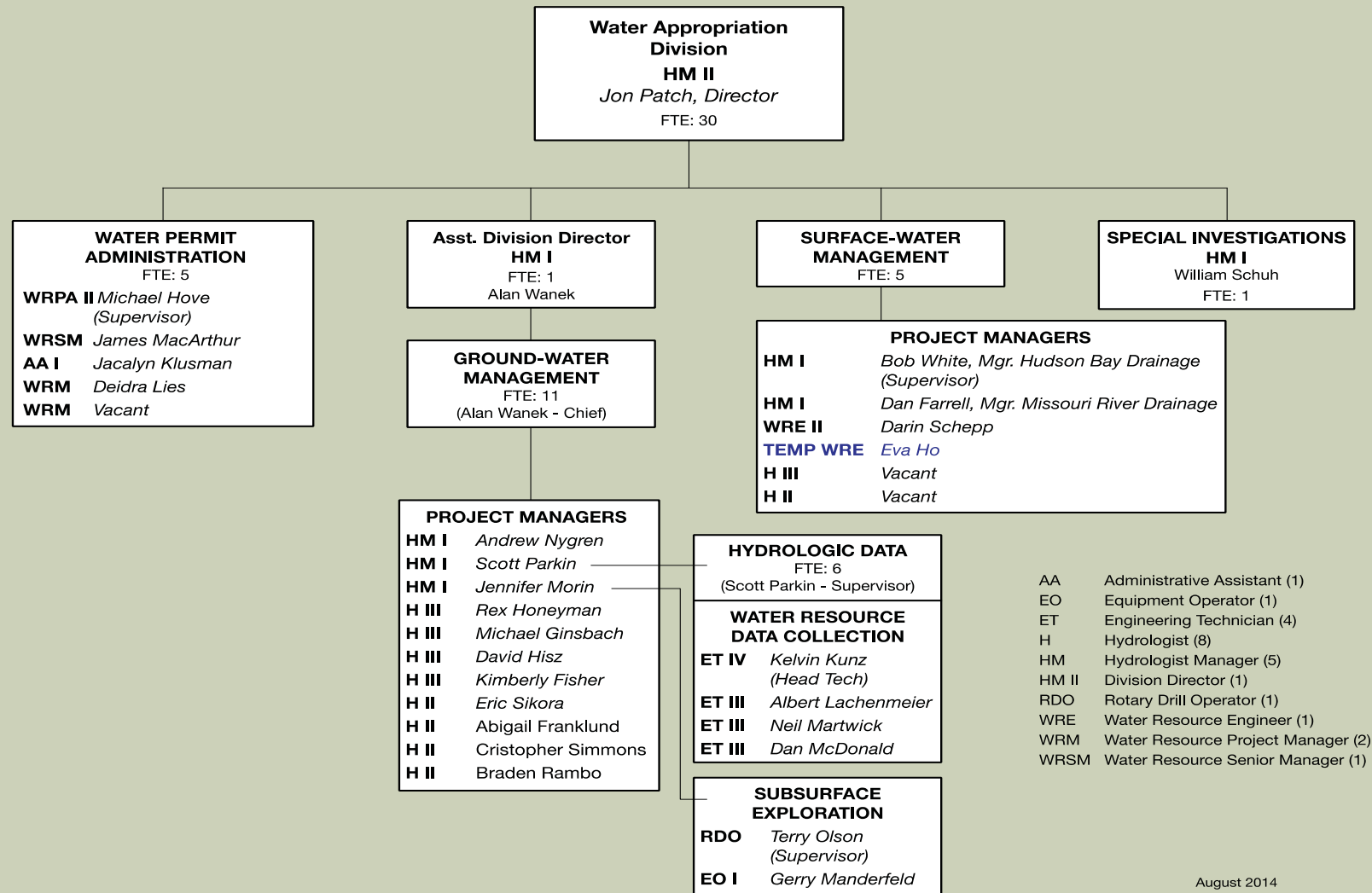
**Jon Patch
Water
Appropriation
Director**

HIERARCHY OF ND GOVERNMENT



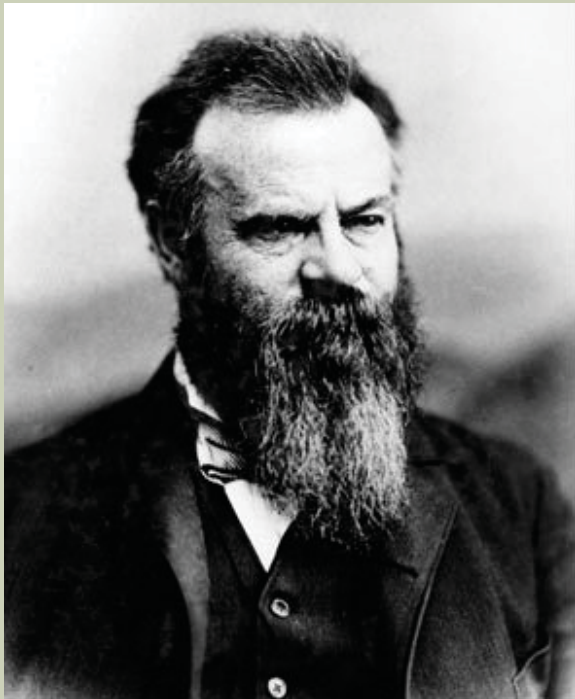
WATER APPROPRIATION DIVISION

North Dakota State Water Commission Water Appropriation Division



ND WATER RIGHTS ADMINISTRATION

- All water belongs to the State
 - **North Dakota Constitution (adopted in 1889) ARTICLE XI Section 3.** All flowing streams and natural watercourses shall forever remain the property of the state for mining, irrigating and manufacturing purposes.



John Wesley Powell

“... All other wealth fall into insignificance compared with that which is to come from these lands from the pouring on them of the running streams of this country. Don’t let these streams get out of the possession of the people. If you fail in making a constitution in any other respect, fail not in this one. Take lessons from California and Colorado.” – Speech to ND Constitutional Convention , August, 1889

N.D.C.C. 61-01-01 WATERS OF THE STATE

(ENACTED IN 1905)

- All waters within the limits of the state from the following sources of water supply belong to the public and are subject to appropriation for beneficial use and the right to the use of these waters for such use must be acquired pursuant to chapter 61-04 (appropriation of water)
 - Waters on the surface of the earth (Surface Water)
 - excluding diffused surface waters
 - Waters under the surface of the earth (Groundwater)
 - All residual waters resulting from beneficial use, and all waters artificially drained; and
 - All waters ... in areas determined by the state engineer to be noncontributing drainage areas.
 - excluding privately owned waters

PRIOR APPROPRIATION

- Prior appropriation doctrine established in law - The first user of water has priority (superior legal right) to continue using the water over subsequent users of the water.
- May obtain a **Water Right** through a system of water permits
 - except Domestic and livestock under 12.5 feet per year do not need a water permit – they have an inferred right to the water dating to the time they first began putting water to beneficial use.

ND WATER LAW VARIATIONS

- Same statutes apply to both ground and surface waters
- ND doesn't recognize in-stream flows as a *water right*
 - water rights require a *diversion* of water or *works* - NDAC 89-03-01-07
 - in-stream flows are taken into account through the public interest consideration (impact on game fish and recreational opportunities) of every permit
- ND doesn't allow for speculative water rights
 - Must show the “ability and intent” to put the appropriation to beneficial use
 - Beneficial use shall be the basis, the measure, and the limit of the right to the use of water – NDCC 61-04-01.2
- Water rights can be forfeited for non-use – NDCC 61-04-23
- ND has a *Priority of Use* only for competing applications

PRIORITY OF USE

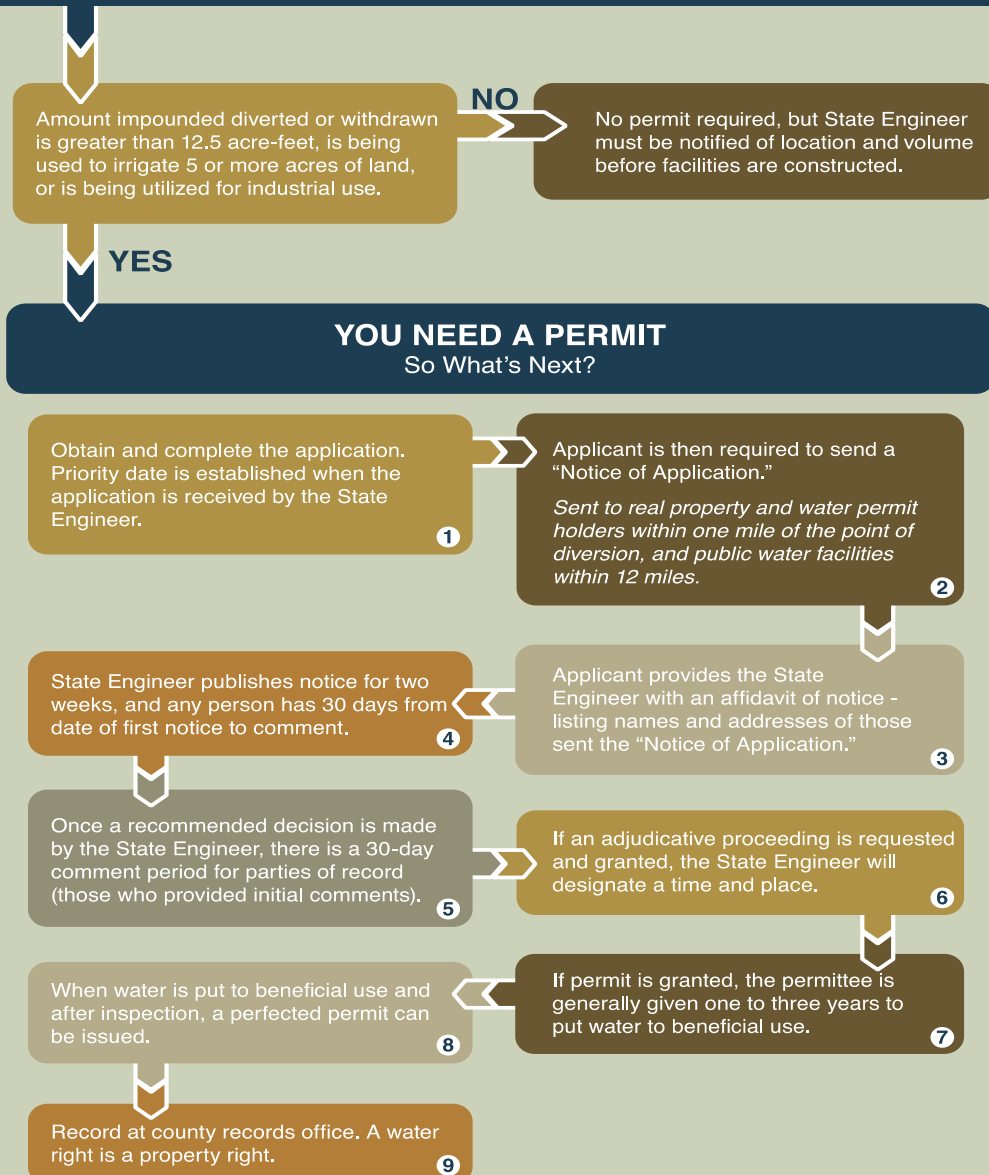
NDCC 61-04-06.1

- 1. Domestic
 - 2. Municipal
 - 3. Livestock
 - 4. Irrigation
 - 5. Industrial
 - 6. Fish, wildlife, and other outdoor recreational uses.
- This order of priority applies in preference in granting permit applications that are filed within 30 days of one another NDCC 61-04-06.1
- Or
- In the event of a change in PURPOSE OF USE of the permit, may only move to a superior use

Irrigation → Municipal ✓

Irrigation → Industrial ✗

Water Permitting Process

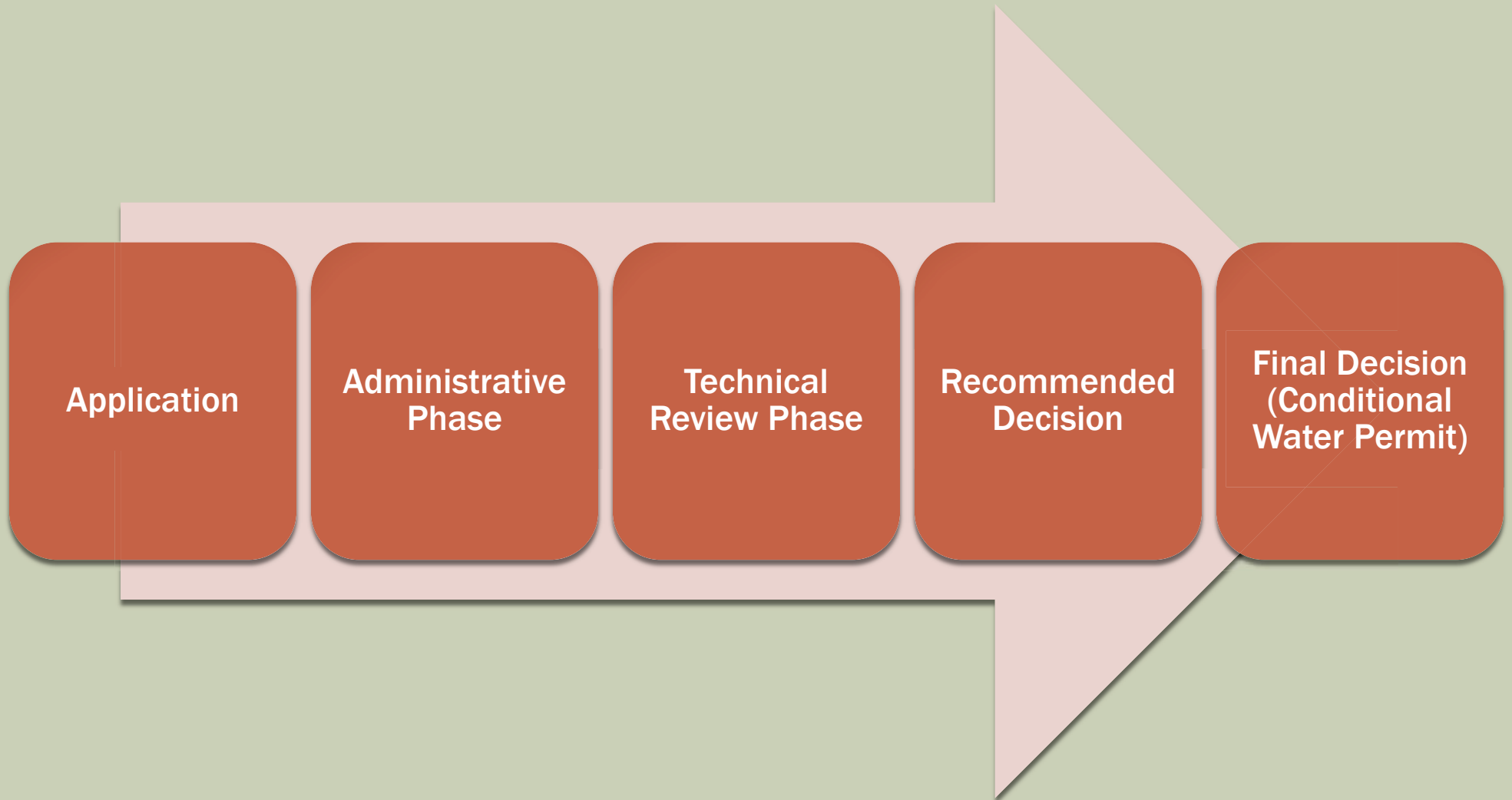


For Additional Information



ND STATE WATER COMMISSION
900 E. BOULEVARD AVE., DEPT 770
BISMARCK, ND 58505
(701) 328-2754 · www.swc.nd.gov
Email swc@nd.gov

STEPS TO A WATER RIGHT



TECHNICAL REVIEW PHASE

- Three primary questions must be answered:
- Will *Rights of a Prior Appropriator* be unduly affected
- Is the proposed use *Sustainable*
- Is the proposed use in the *Public Interest*


RESOURCE MONITORING AND DATA COLLECTION

- **Actively monitor about 4000 observation wells per year**
- **Collect about 1300 water quality samples per year from our monitoring network**
- **Install about 125 new observation wells each year in our aquifers**
- **Cooperative Stream-gage network with USGS – 46 gages**
- **Maintain a massive web-accessible database.**
 - **1.5M groundwater-level measurements**
 - **35,000 site locations**
 - **68,000 water quality analyses**
 - **25,000 sites with lithological descriptions**

CONDITIONAL (PERFECTED) WATER PERMITS

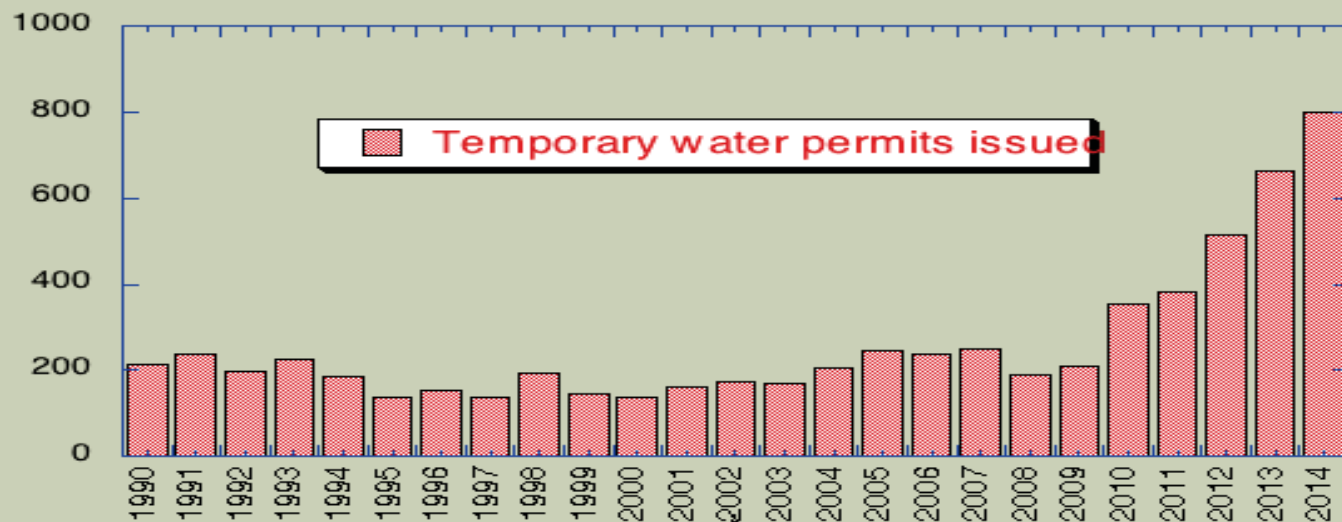
- \approx 3,850 conditional and perfected water permits
- \approx 550 pending conditional water permit applications.
- Prior to the early stages of the oil boom in 2009, the Division received about 75 conditional water permit applications per year. Of this total, about 30% were for industrial use.
- Today the Division is receiving about 150 conditional water permit applications per year of which about 50% are for industrial use, mostly for hydraulic fracking.

RIGHT TO USE WATER vs. PERMISSION TO USE WATER

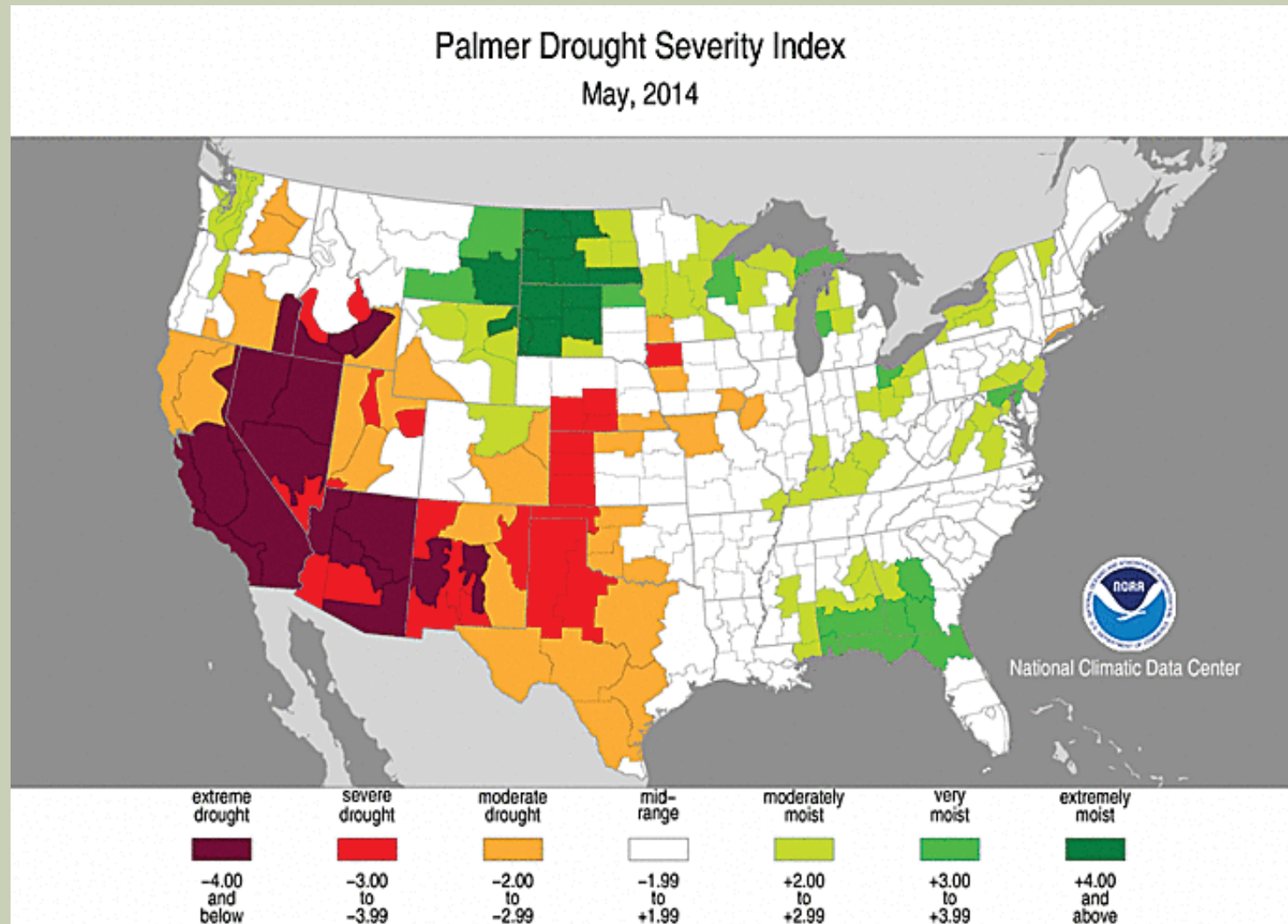
- Conditional Water Permit  Perfected Water Permit
- Perfected Water Permit  Water Right
 - Conditional water permits have the ability to become Perfected permits upon beneficial use and inspection.
- **Temporary Water permits** = permission to use water
 - Last up to a maximum of 1 year
 - No water right accrues

TEMPORARY WATER PERMITS

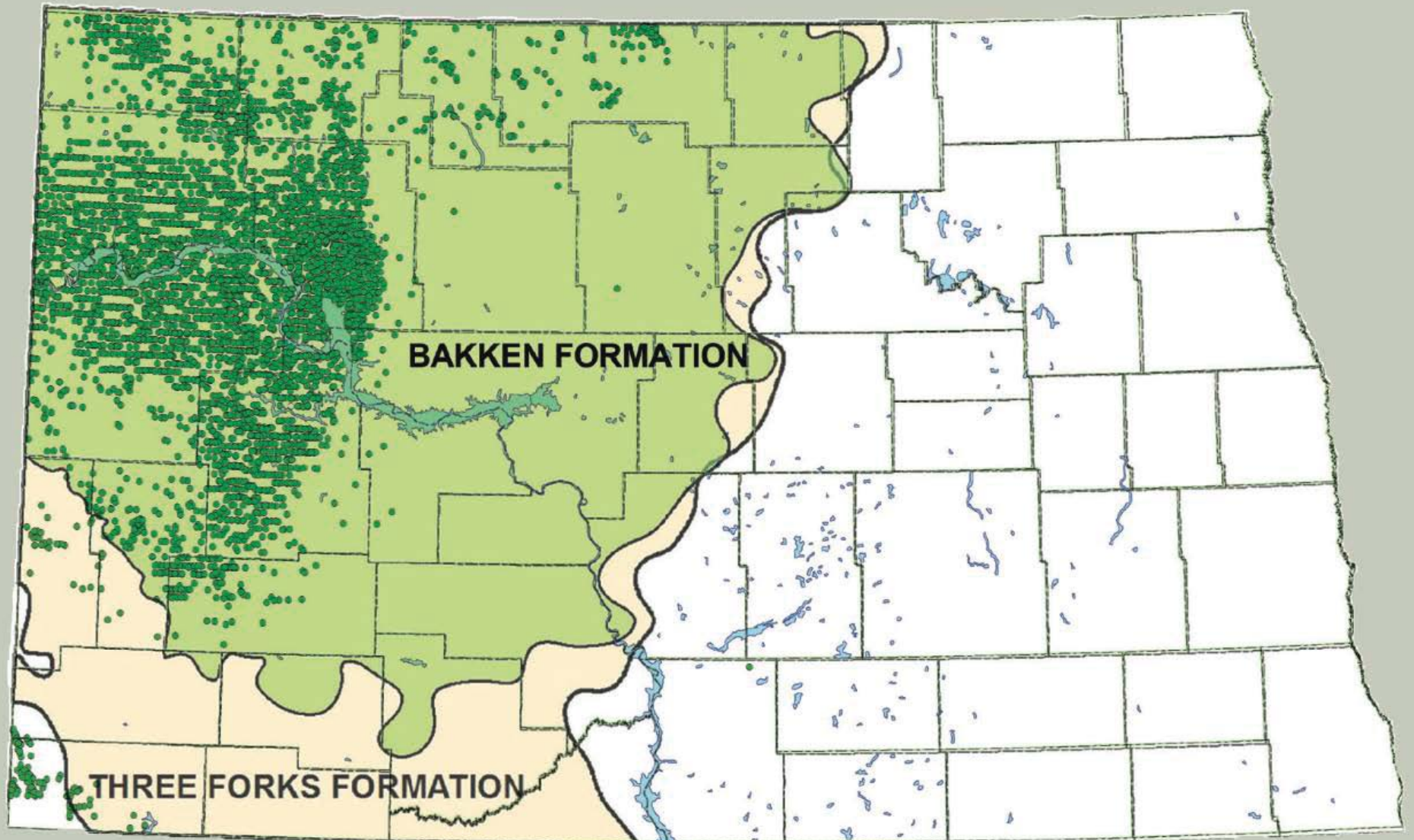
- $\approx 1,000$ active temporary water permits
- Meant for excess water on the landscape
- Groundwater off-limits for temporary industrial use (except for industrial in-lieu-of irrigation)
- Prior to the oil boom, we processed about 200 temporary water permits per year.
- In 2014 we've received 800 so far.



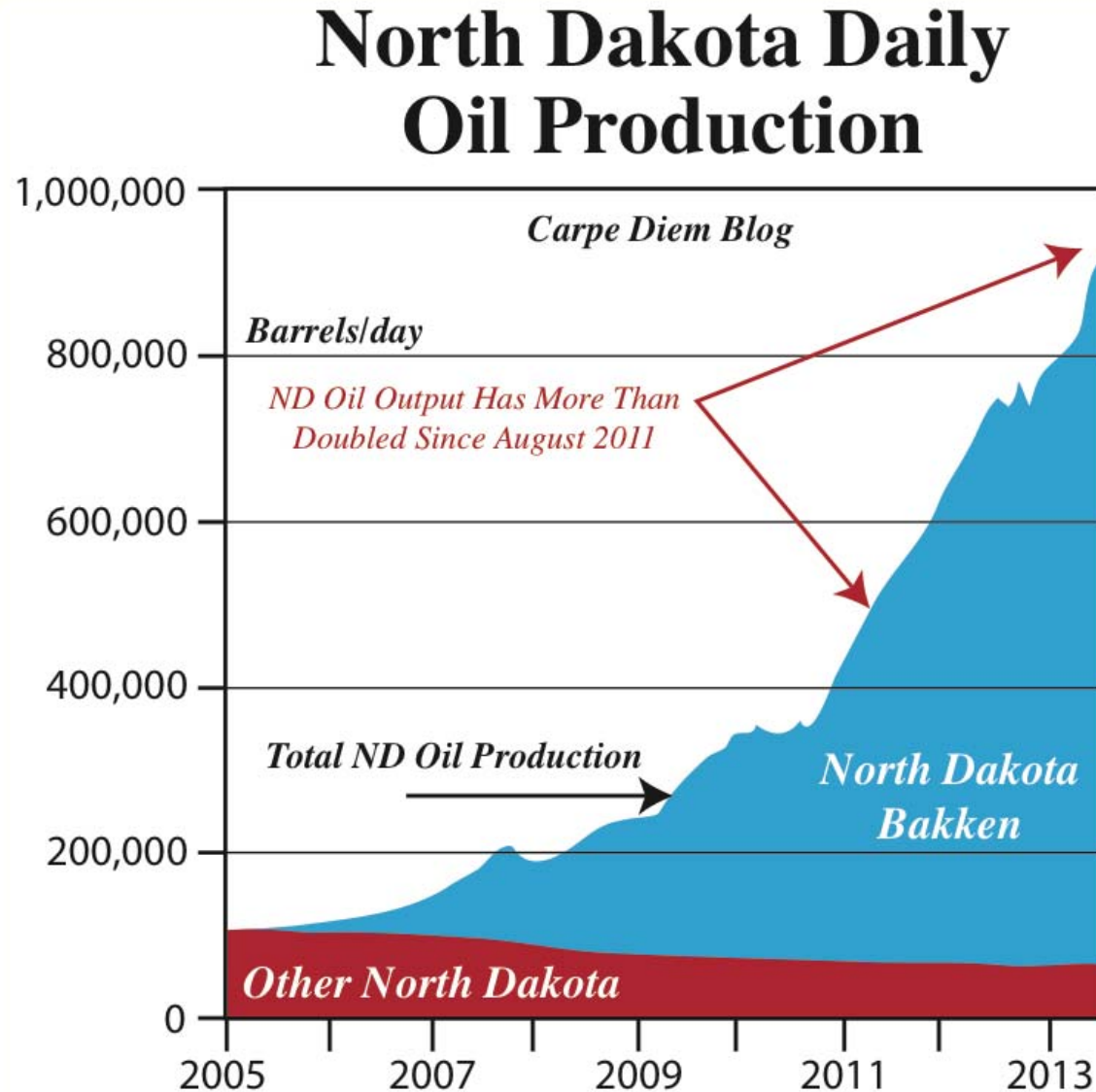
WET CONDITIONS = EXCESS WATER



THE BAKKEN



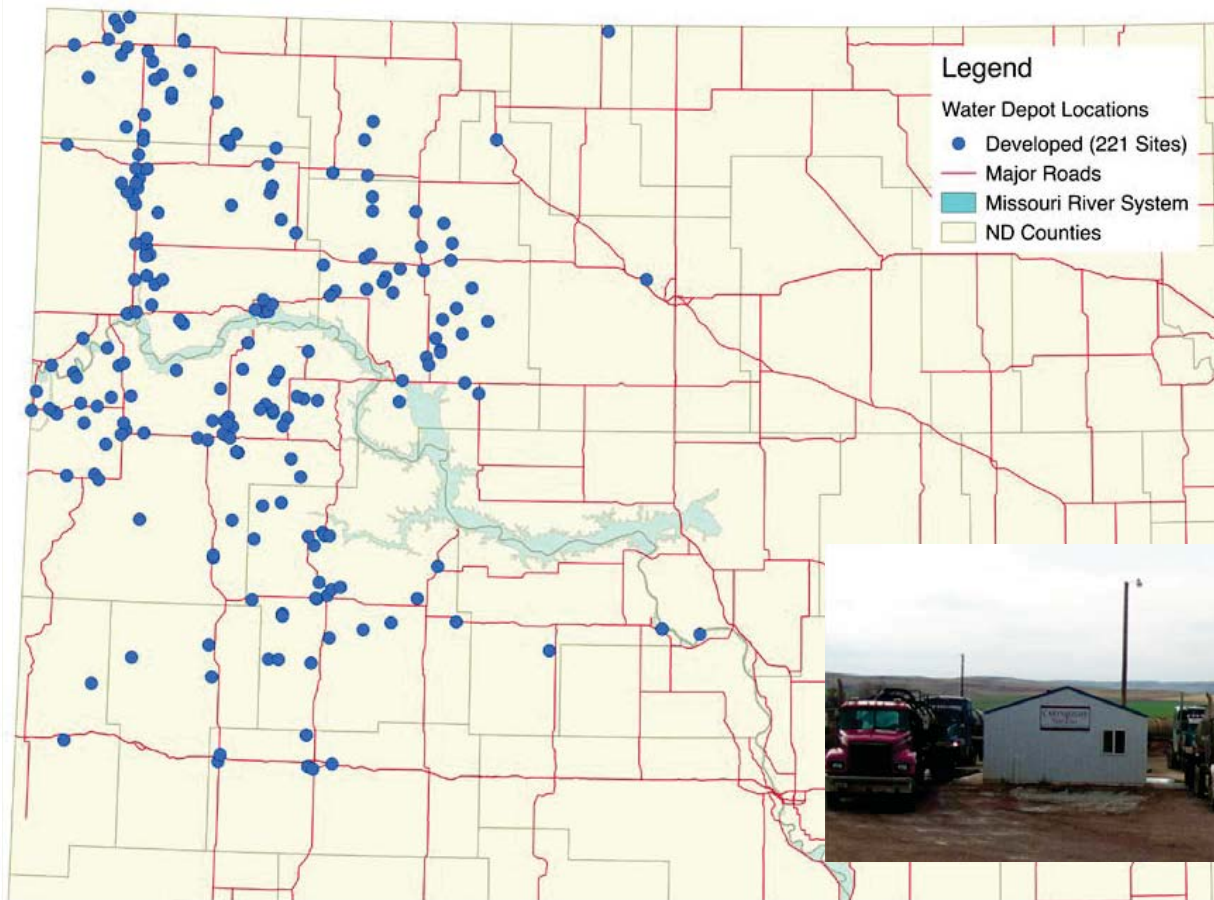
OIL PRODUCTION



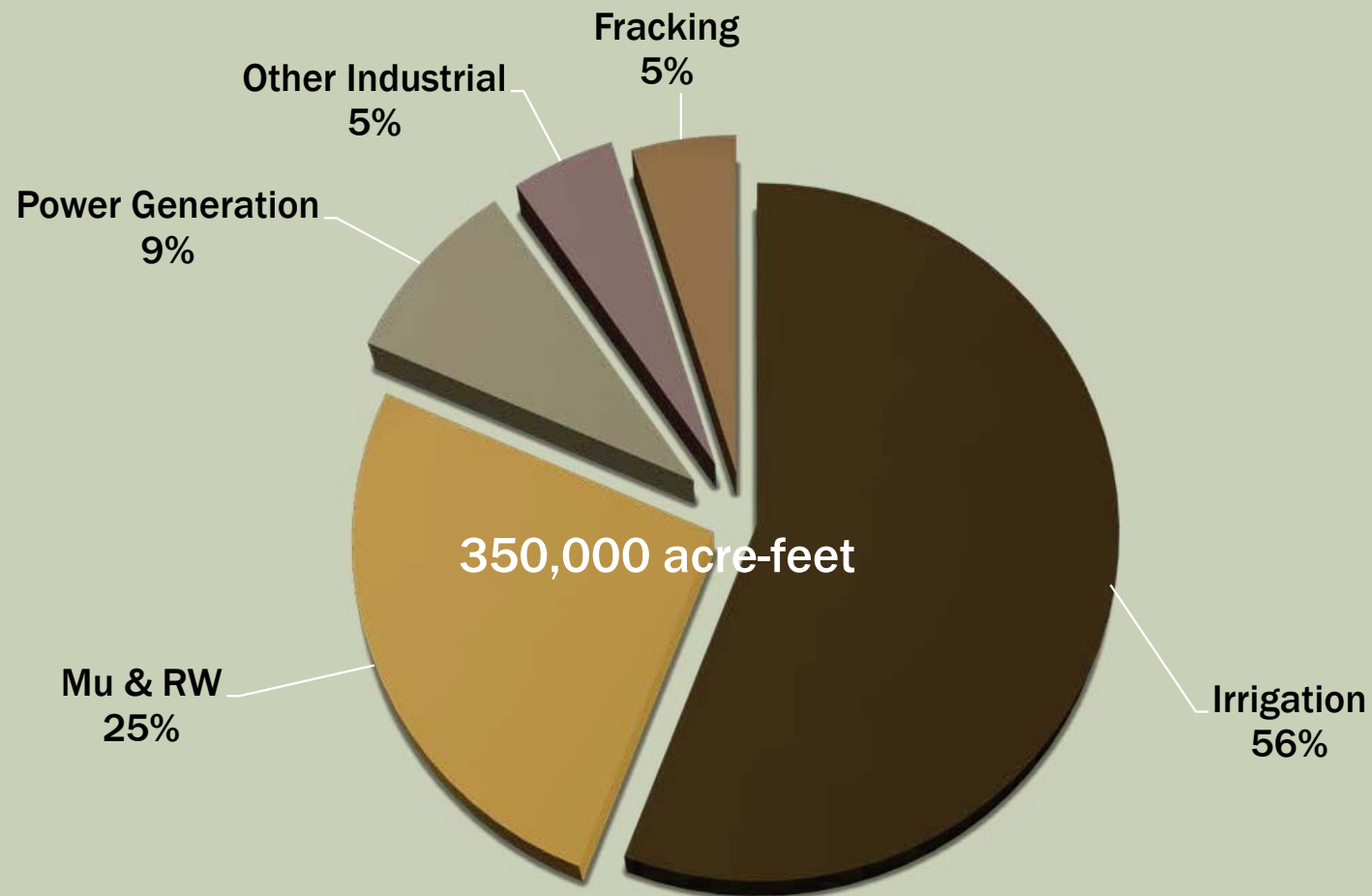
MANAGEMENT CHALLENGES

- Before July 1, the division had 13 hydrologists that are responsible for appropriation of the state's water resources.
- Prior to 2010 the Division had three hydrologists covering the western 1/3 of the state.
- Existing staff was reassigned, and there are now 7 hydrologists assigned to the West.
- These reassignments have caused backlogs and concerns in other parts of the state – particularly related to irrigation applications.
- Emergency Commission granted 5 new FTEs

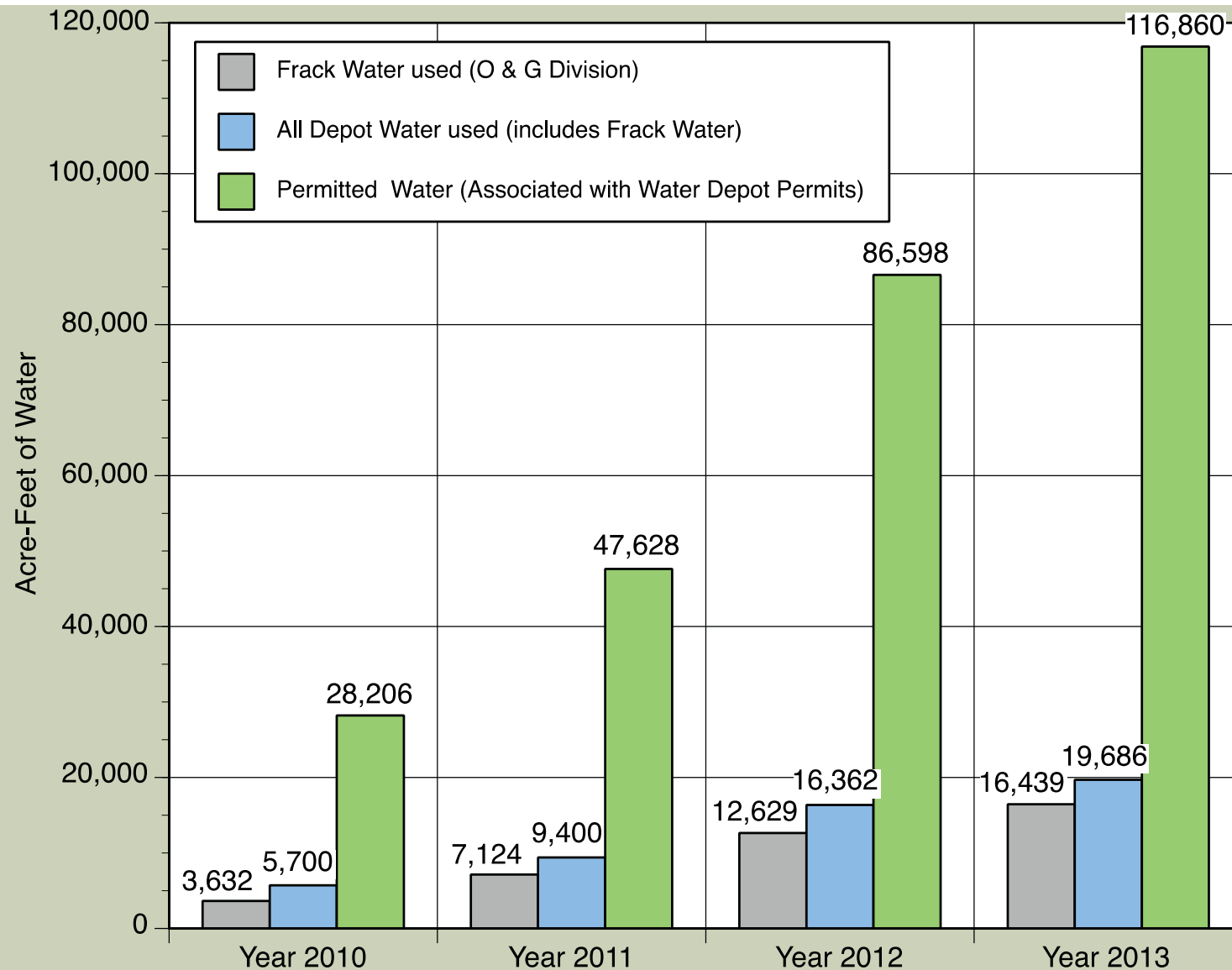
NEW PHENOMENON – THE WATER DEPOT



ND CONSUMPTIVE USE -2013



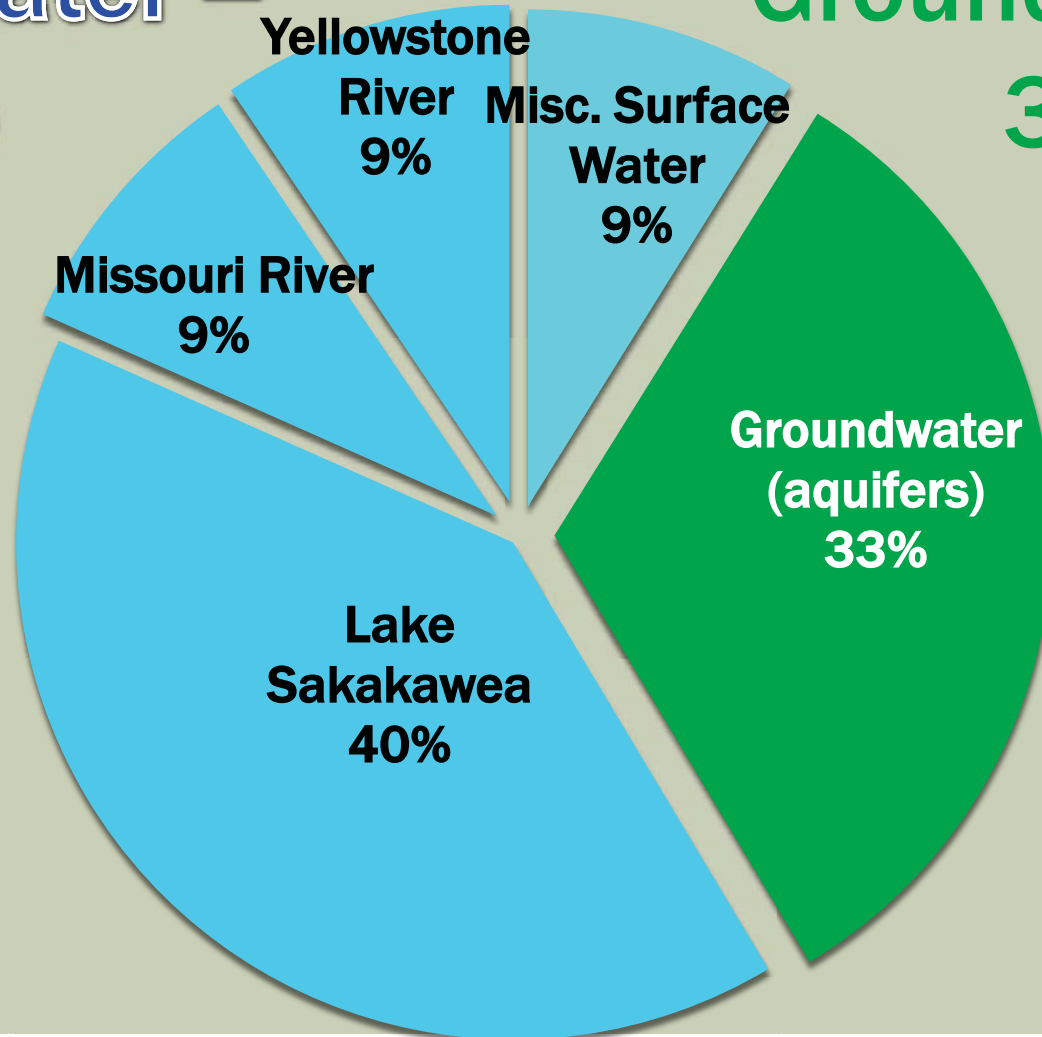
WATER DEPOT USE IN THE BAKKEN



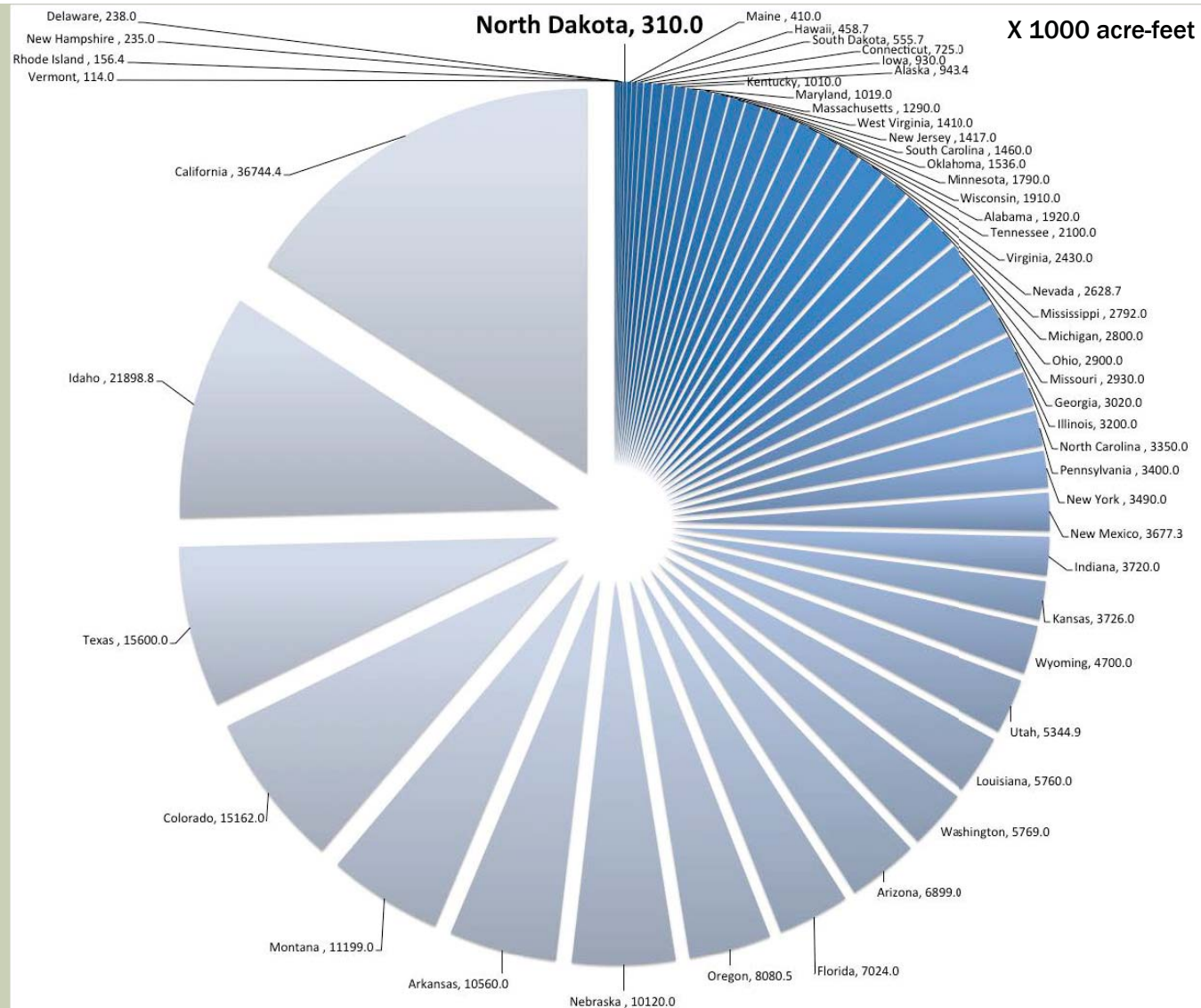
SOURCES FOR FRACKING WATER IN ND

Surface Water =
66%

Ground Water =
33%

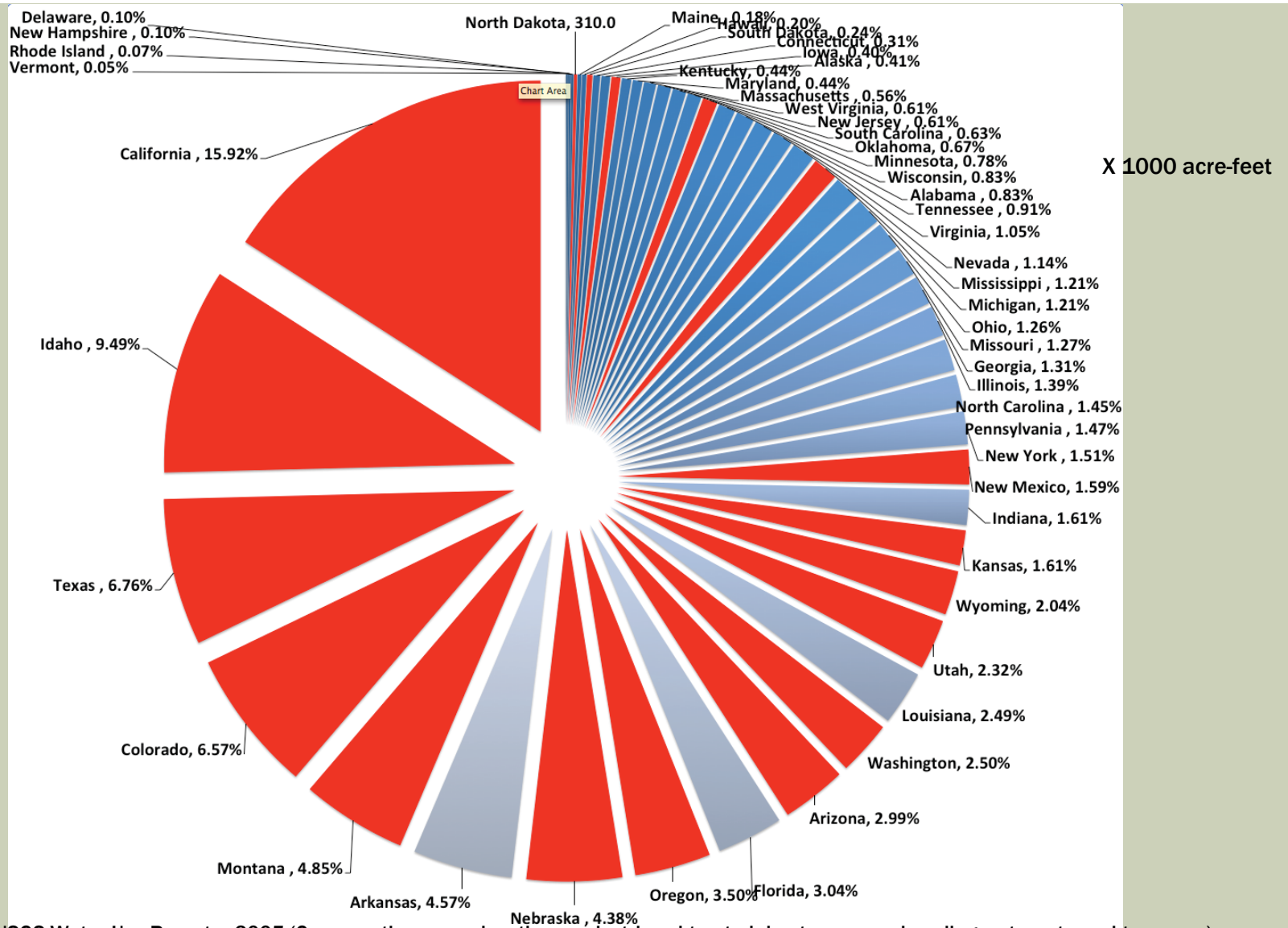


CONSUMPTIVE WATER USE IN THE UNITED STATES



Source: USGS Water Use Report - 2005 (Consumptive use only - thermoelectric subtracted due to assumed cooling water returned to source)

CONSUMPTIVE WATER USE IN THE UNITED STATES

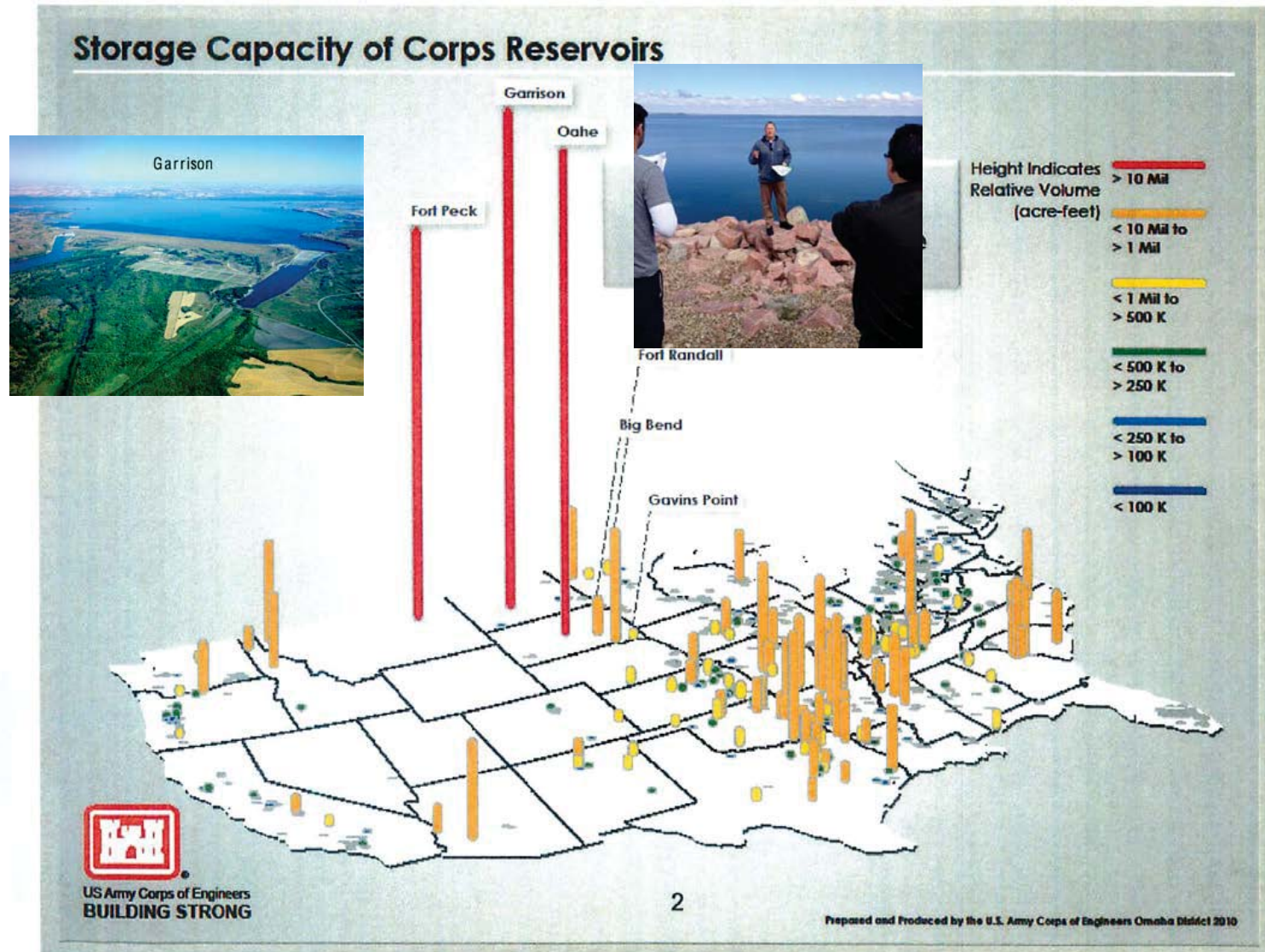


Source: USGS Water Use Report – 2005 (Consumptive use only – thermoelectric subtracted due to assumed cooling water returned to source)

WATER'S USE OF NORTH DAKOTA

GARRISON CAPACITY: 24M AC-FT

#1



STATE ENGINEER WATER USE MONITORING PROGRAM

- Evolved from a voluntary reporting program to a mandatory reporting program
- Statutes requires annual reporting
- Recently instituted a fine structure for failure to report water usage
- Due to the increase in demand and potential overuse because of profit potential for industrial water sales, we have implemented a real-time telemetry monitoring requirement
- We are doing spot field inspections by our technicians and hydrologists when in the area.

ANOTHER NEW PHENOMENON - WATER THEFT

- Going rate for raw water used in the fracking process:
 - \$0.01 to \$0.02 per gallon
 - \$0.42 to \$0.85 per barrel
 - \$3200 to \$7500 per acre-foot

Temptation is high to skip
the permit process



PENALTIES FOR WATER “STEALING”



A. Civil Penalties
NDCC 61-03-23

B. Criminal Penalties
NDCC 61-04-30

CIVIL PENALTIES

- a person who violates ...*may be assessed a civil penalty not to exceed twenty-five thousand dollars for each day the violation occurred and continues to occur and ...forfeit any right to the use of water.*



CRIMINAL PENALTY

- **A person who constructs works for an appropriation, or diverts, impounds, withdraws, or uses a significant amount of water from any source without a permit ... or who knowingly makes a false or misleading statement in a declaration of existing rights **is guilty of a class A misdemeanor.****

“Significant amount” is any amount in excess of that allowed in a valid permit, or any amount of water in excess of the needs for domestic and livestock purposes where no permit has been issued..

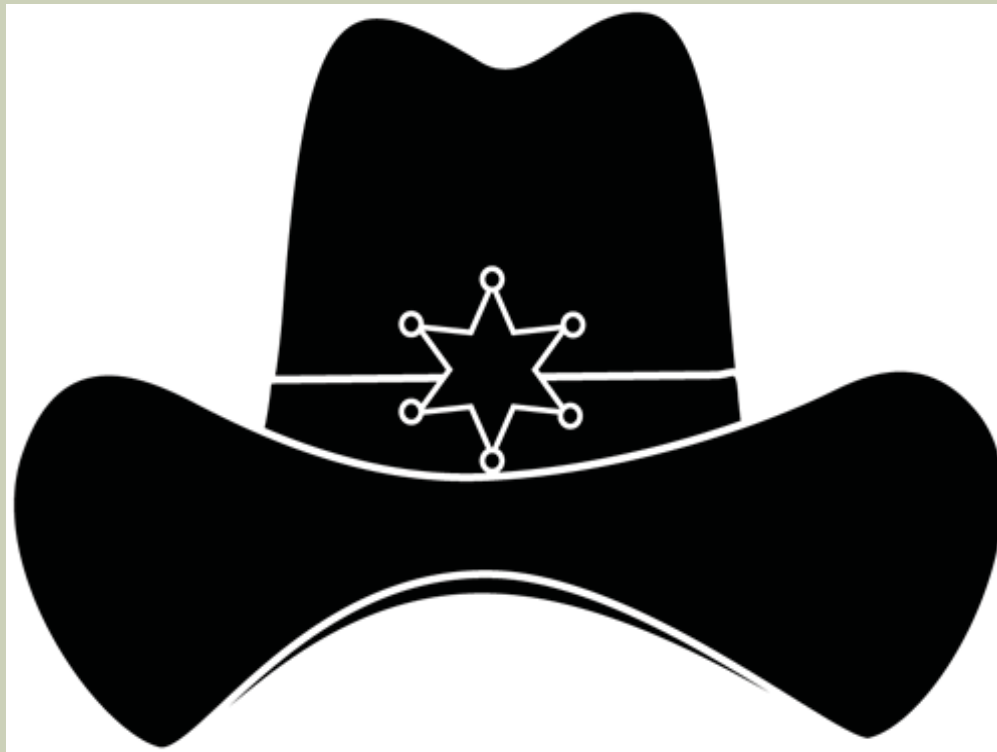


In North Dakota, Class A misdemeanors carry a potential sentence of up to 1 year in jail and \$2,000 in fines.

Goes on your “record”

ENFORCEMENT PHILOSOPHY

- The violator should not profit from illegal activity - the fine is based on the amount gained from the overuse and the profit made from the sale.
- There should be a net zero impact on the managed resource. The amount overused will be subtracted from future use.



CEASE AND DESIST ORDER

- When enough evidence exists to justify
- Can be processed quickly

STATE OF NORTH DAKOTA
OFFICE OF STATE ENGINEER

IN THE MATTER OF)	Administrative Order
)	No. 12-17
Order to Cease Water Use in the)	
SE¼ of Section 31, Township 151 North,)	ORDER OF THE
Range 98 West, McKenzie County,)	STATE ENGINEER
North Dakota.)	

TO: [REDACTED], PO Box [REDACTED], Watford City, North Dakota 58854.

The North Dakota State Engineer (State Engineer), pursuant to North Dakota Century Code § 61-04-29 and all other applicable sections, hereby ORDERS [REDACTED] to cease water use in the SE¼ of Section 31, Township 151 North, Range 98 West, McKenzie County, North Dakota.

As the basis for this Order, the State Engineer states as follows.

1. [REDACTED] operates a water sales business in the SE¼ of Section 31, Township 151 North, Range 98 West, McKenzie County, North Dakota.

CONSENT AGREEMENTS

Used with water-statute violators to fit the penalty to the crime.

ADMINISTRATIVE CONSENT AGREEMENT

This Administrative Consent Agreement (Agreement) is entered into between the State of North Dakota, Office of the State Engineer (State Engineer) and [REDACTED], [REDACTED], Watford City, North Dakota 58854.

FINDINGS OF FACT AND CONCLUSIONS OF LAW

The State Engineer has found and determined the following Findings of Fact and Conclusions of Law that [REDACTED] concurs are true and correct.

1. The State Engineer is authorized and obligated to administer and enforce N.D.C.C. ch. 61-04, Appropriation of Water.
2. [REDACTED] is subject to the requirements of N.D.C.C. ch. 61-04 and rules adopted thereunder.

STIPULATED AGREEMENT

14. After full and complete negotiation of all matters set forth in this Agreement and upon mutual exchange of covenants contained herein, the parties agree to settle these matters for all purposes on the following terms:

¹ "[S]ignificant amount of water" means any amount of water in excess of that allowed in a valid water permit. N.D.C.C. § 61-04-30.


- 2 -

IN WITNESS WHEREOF, [REDACTED] consents to the entry of this Agreement and the foregoing findings of the State Engineer.

Dated November 27, 2012.



STATE OF NORTH DAKOTA

By: 
Todd Sando, P.E.
State Engineer

12-21-12
Date

CONSENT AGREEMENT POLICY

The policy of the State Engineer is to:

1. Establish a fine that is **at least equal to the value of the water sold** to take the profit out of illegal water sales.
2. For those with water rights (conditional or perfected water permits), the quantity of water pumped in excess of that permitted is subtracted from the following year(s) allowed use, to result in **no net impact to the water resource**.
3. Criminal penalties are **“taken off the table”**
4. Fines since 2012 have totaled over a \$2.7M.

THANK YOU!

