



Highway 9 Construction Update

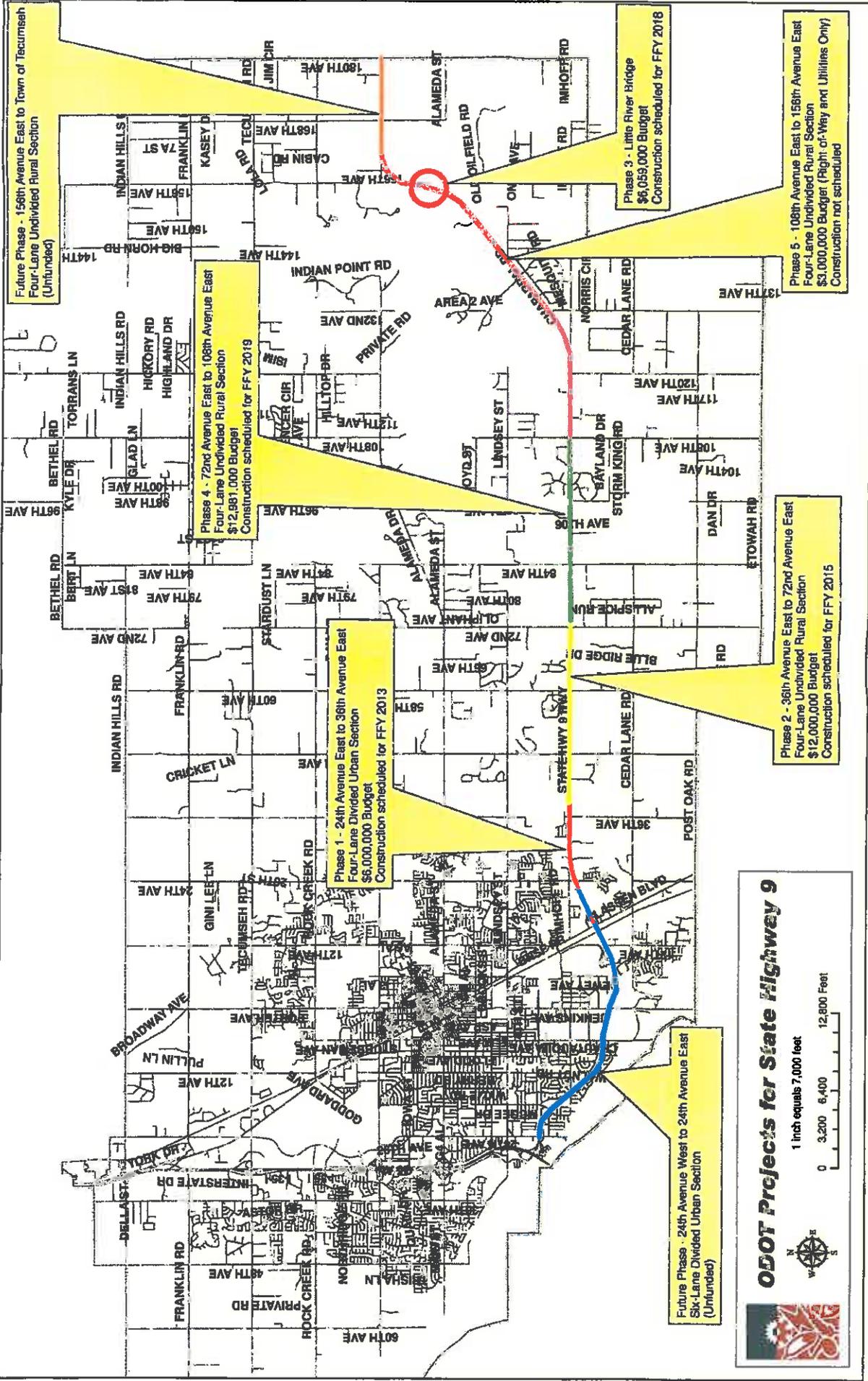
State Highway 9 – 24th Avenue SE to 36th Avenue SE

The State Highway 9 Widening Project is a \$9.6 million highway improvement project awarded to Allen Contracting of Oklahoma City. The project began on July 7, 2014 and will be completed in April 2015. The construction contract allows the contractor to earn early completion incentive pay at \$7,000 a day with a maximum of 90 days, for an early completion date of January 2015. The Oklahoma Department of Transportation (ODOT) is administering the construction of this project.

When the project is complete, the roadway will be widened to four lanes with a center median, intersection improvements at 24th Avenue SE, signalization of Technology Place, John Saxon Boulevard and 36th Avenue SE, improved drainage and a new bridge over a Dave Blue Creek tributary. The Oklahoma Department of Transportation will be administering the construction of the project.

Future Highway 9 Improvements

Attached is a map showing future phases and funding projections from the Oklahoma Department of Transportation (ODOT) for proposed improvement projects on Highway 9.





TMDL Update

Background

Completed in November 2013 by the Oklahoma Department of Environmental Quality (ODEQ), the Total Maximum Daily Load (TMDL) study determined the limits of pollution (total suspended solids, chlorophyll-a, nitrogen and phosphorus) a water body can receive without violating water quality standards. The study results concluded that Compliance and Monitoring Plans should be developed to determine best management practices designed to reduce pollutants in the next 20 years and show sustained progress toward reduction in daily amounts of total pollutants entering Lake Thunderbird. The Compliance Plan will be completed by 2015.

Recent Activity

On Tuesday, August 12th, the City Council will consider awarding a contract to Olsson Associates to develop a Compliance Plan and Monitoring Plan for the Lake Thunderbird TMDL. The scope of this work will include:

- Data Review and Analysis,
- Evaluation/Assessment of Contributing Watershed
- Compliance Plan Development
- Monitoring Plan Development
- Agency Coordination and Public Involvement
- Cost Recovery Method Assessment and Recommendations

Public meetings regarding the consultant's results are anticipated to take place in May 2015. The Final Report will be finished in October 2015 and will then be submitted to the Oklahoma Department of Environmental Quality (DEQ) and the Environmental Protection Agency (EPA) for final approval.

Upon completion of the Plan, the City will then begin implementing the recommended best practices for compliance and monitoring of the quality of Lake Thunderbird. City of Norman staff continue working with the City of Moore and Oklahoma City to further enhance water quality standards for Lake Thunderbird.



Oil and Gas Drilling Policy Updates

*** Attached is a synopsis of items included in the current City of Norman Oil, Gas and Mineral Production Ordinance, along with a map depicting locations of wells that are currently active in Norman or are in the completion phase of drilling operations***

Oil and Gas Drilling and Permit Fees

On July 8th, the City Council approved Ordinance O-1314-57 which amends Chapter 13, Section 1501 of the City Code to increase the current annual inspection and drilling permit fees for oil and gas production. The drilling permit fees were raised from \$3,000 to \$5,000 and the annual inspection fees were raised from \$225 to \$450.

Oil and Gas Flaring

Currently, the City does not have an ordinance that prohibits or regulates gas flares (open or enclosed) and flaring operations are regulated by the Oklahoma Corporation Commission (OCC). The Norman Fire Department is made aware of planned well flares and inspects the location with the Oil and Gas Inspector prior to the installation and use of flares for drilling operations.

Beginning in January 2015, the U.S. EPA will require that new wells that utilize hydraulic fracturing during their operations capture the gas, which the EPA terms “green completions”, to control air emissions.

Green completions will not be required for:

- New exploratory (“wildcat”) wells or delineation wells (used to define the borders of a natural gas reservoir), because they are not near a pipeline to bring the gas to market.
- Hydraulically fractured low-pressure wells, where natural gas cannot be routed to the gathering line.
- Owners/operators must reduce emissions from these wells using combustion during the well-completion process, unless combustion is a safety hazard or is prohibited by state or local regulations.

Until then, well operators will be allowed to direct emissions to a combustion device (e.g. flare) as an alternative to green completions. In Oklahoma, these new rules will be enforced by the Oklahoma Department of Environmental Quality (DEQ).

The Council Oversight Committee discussed the issue of oil and gas well flaring on May 14, 2014. The Committee discussed and agreed the City staff will check and address issues regarding flaring on a case-by-case basis if and/or when they should arise.

Oil and Gas Well Site Security and Fencing

The current City regulations require six-foot chain-link fencing. All well sites in Norman have fencing as required at the time they were drilled. Those sites do meet the ordinance standards that were in effect at the time of drilling. The Council Oversight Committee will continue discussions related to fencing regulations and other site safety concerns at future committee meetings.



Current City of Norman Oil and Gas Ordinance Synopsis

Permitted Drilling Areas

The City of Norman ordinance does not require a Special Use Permit for drilling. Drilling is not allowed in the following circumstances:

- on parcels less than 10 acres, unless there is consent from the surface owner
- on properties zoned as parkland, in a parkland district or in a Planned Unit Development (PUD).
- areas contained or described by approved Final Plats and Rural Certificate of Surveys (COS)

These restrictions result in a majority of the drilling taking place in A-2 zoned properties not final platted or contained within a COS.

Zoning Setback/Land Area Requirements

The following setback and land area requirements are contained in the Ordinance:

- No internal combustion engine drilling operations within 600 ft. from any dwelling or business structure (unless waived by the landowner)
- No drilling or operations within 600 ft. from any church or school (unless waived by the landowner)

Water Well Requirements

- No drilling or operations within 300 ft. of any producing freshwater well
- Domestic and public water wells within ¼ mile of enhanced recovery or disposal well tested before injection or disposal; annual testing of wells in that area required after completion (*at permittee's expense*)

Insurance /Bond & Letter of Credit Requirements

- Seepage and Pollution Policy - \$1M; \$500K for "Stripper Wells"
- Comprehensive Public Liability Policy - \$100K/person; \$300K/accident; \$200K/property damage per occurrence
- Bond or Irrevocable Letter of Credit - \$25K; can be increased to \$100K if cause is shown

Hydraulic Fracturing Requirements

- None outlined in Ordinance. This is regulated by the State Corporation Commission.

Road Maintenance and Repair Provisions

The Ordinance contains a statement regarding street/sidewalk repair provisions:

"The permittee will promptly restore the streets, sidewalks, vegetation and other public property which may be disturbed or damaged in the permittee's operations to their former condition, and the permittee will promptly clear all premises of litter, trash and waste, and will, after abandonment, grade,

level and restore said property to the same surface condition as practical and as possible, as existed prior to commencing operations.”

Fencing Requirements

- 6ft. fence “impregnable to children or animals under ordinary or foreseeable circumstances”
- Requirement can be waived or fencing type can be designated by Oil and Gas Inspector if well is 600ft. from dwelling or business structure
- Fences must be locked at all times; Oil and Gas Inspector has keys to access

Additional Environmental Requirements

- Permittee’s are required to be in compliance with the environmental criteria outlined in the Department of Housing and Urban Development (HUD) guidebook: *Siting of HUD-Assisted Projects Near Hazardous Facilities*.
- All leaks and spills over 2 barrels are to be reported to the Oil and Gas Inspector within 24 hours

Use of Potable Water during Drilling Operations

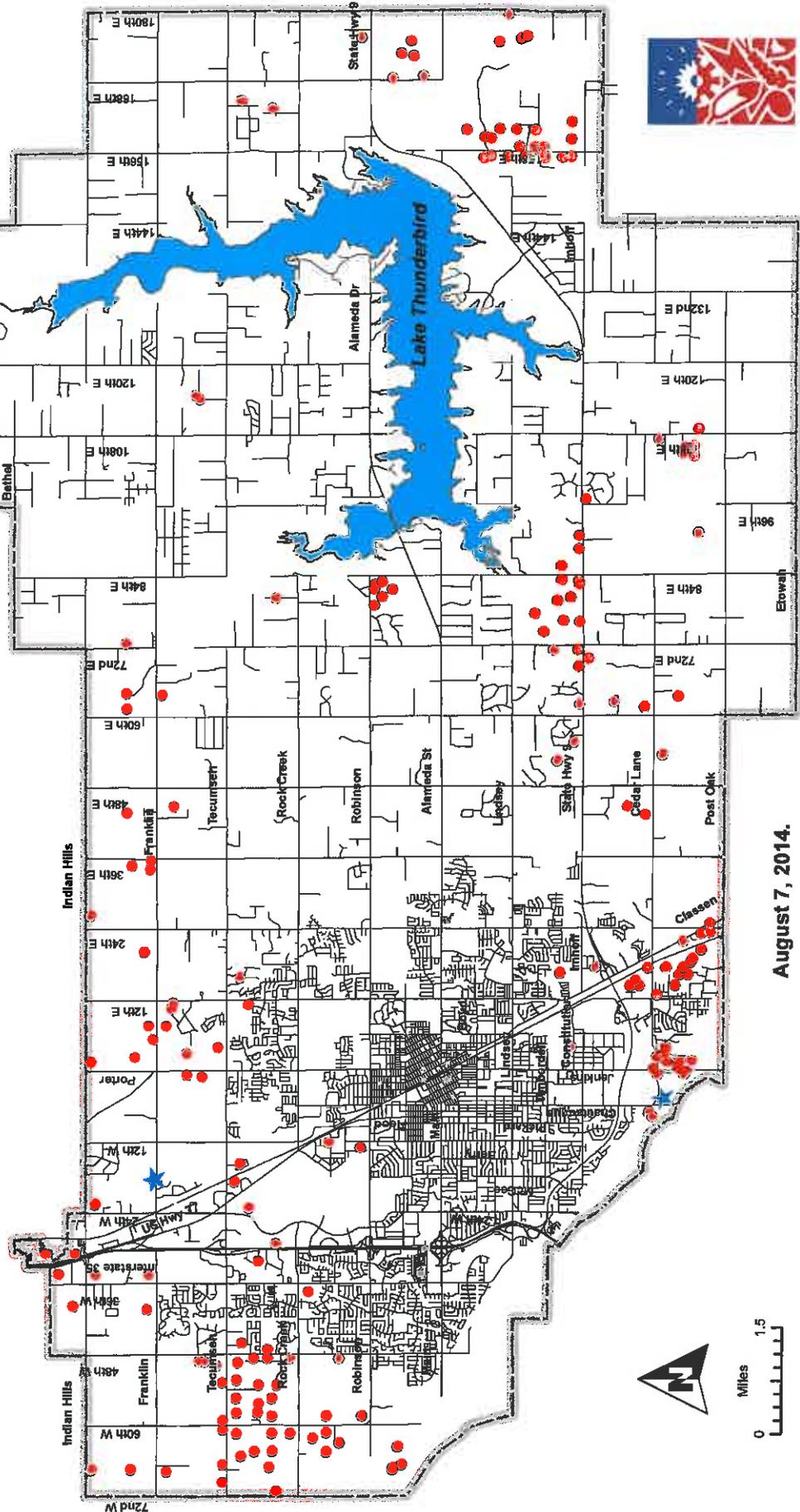
- No language restricting use in the Ordinance

Noise Regulation

- As outlined in the City Noise Ordinance

Active Wells

- ★ In Completion Phase
- Existing

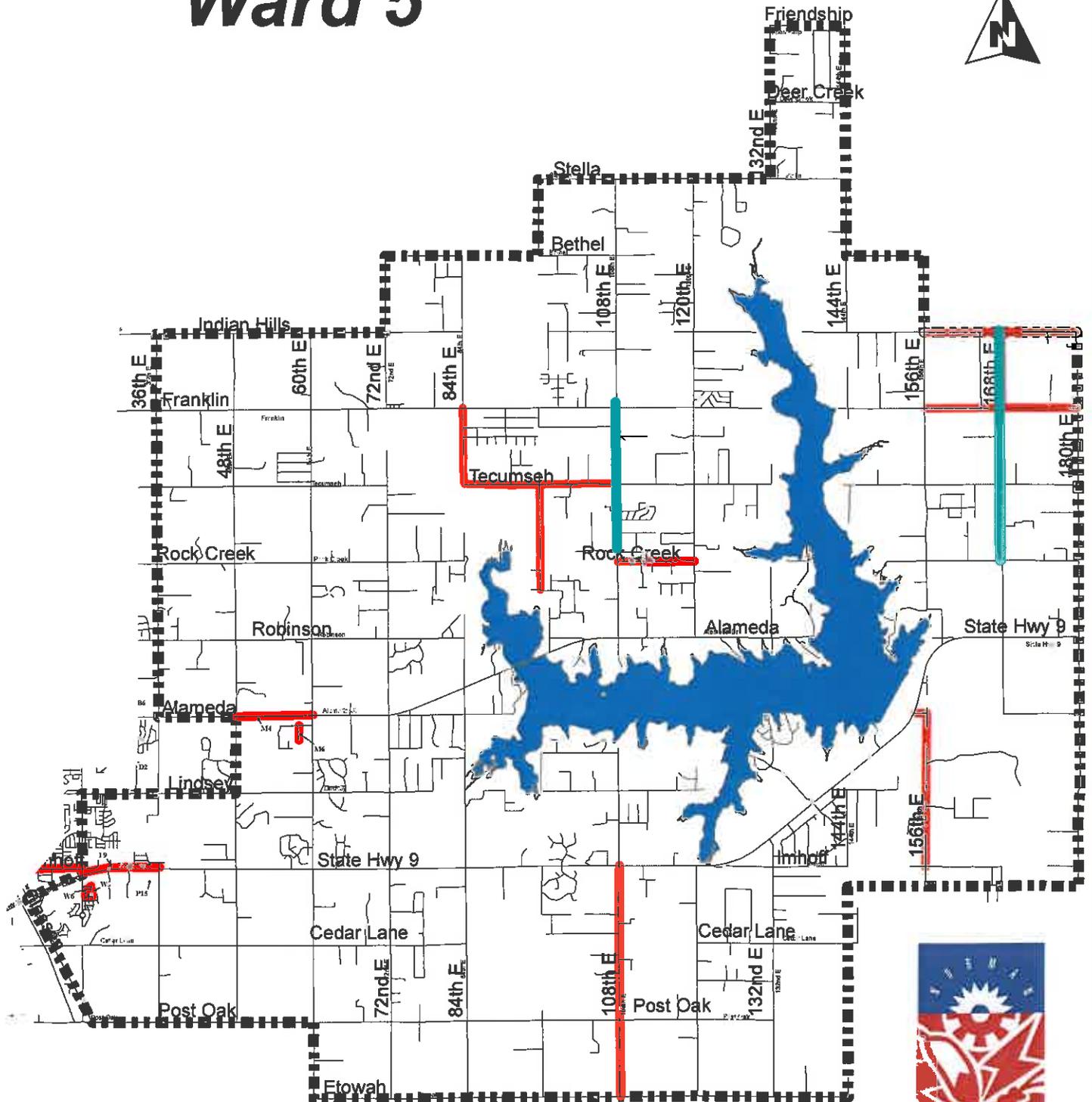


August 7, 2014.



Map produced by the City of Norman Geographic Information System. The City of Norman assumes no responsibility for errors or omissions in the information presented.

Ward 5



August 7, 2014.

-  2015 CIP Projects
-  Disaster Recovery Projects



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Community Development Block Grant Disaster Relief (CDBG-DR) Program Update

In late June 2014, the City was notified of the availability of a second round of funding through the Community Development Block Grant – Disaster Recovery (CDBG-DR) Program. These funds are being funneled through the Oklahoma Department of Commerce (ODOC) and are available for counties that were declared disaster areas due to tornados/fires over the last several years. Of the approximately \$82,000,000 for Oklahoma, more than \$42,000,000 was designated for Cleveland and Creek Counties.

Norman/Cleveland County was included because of the severe storms and tornadoes in May and June 2013 and the wildfires in August 2012. **With respect to eligible activities, all projects must be in the areas designated as disaster areas and meet the regulations of the CDBG Program;** the State must ensure that at least 50% of the funds are used for activities that benefit low-and-moderate income persons. Also, no duplication of funding can be recommended, such as projects that previously received Federal Emergency Management Agency (FEMA) funding. Recent income information provided by Housing and Urban Development (HUD) has allowed this application to be considered a 100% benefit to low and moderate income persons, thereby meeting one of the major criteria for funding.

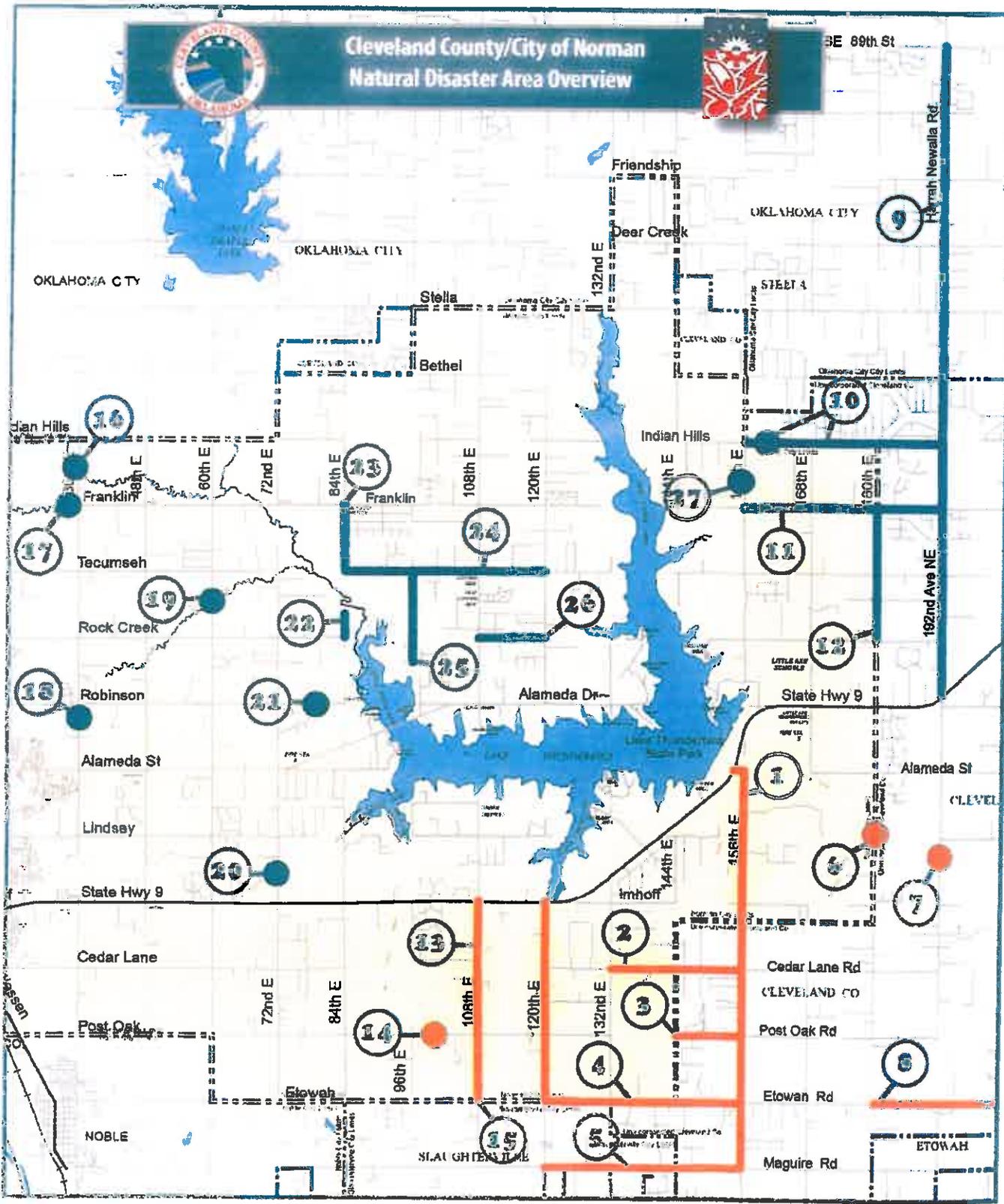
The City of Norman and Cleveland County have formed a partnership in submitting a proposed use of funds for projects totaling \$49,221,000 that includes 27 infrastructure projects and two lists of equipment purchases.

Infrastructure projects include 44.3 miles of road reconstruction and/or resurfacing; and repair and/or replacement of 10 bridges. County/City equipment requests total \$2,599,014, and the Fire Department requests for Little Axe, Slaughterville, Cedar Country, Noble, and Lexington total \$2,574,500. An additional \$96,000 is being requested for Cleveland County Emergency Management. All projects submitted were priced as contracted work in the proposal, and construction is anticipated to be done by private contractors, with no local cost sharing required.

The City of Norman/Cleveland submitted a joint proposal to the ODOC on July 17, 2014. Currently, the ODOC is reviewing proposals submitted from all of the eligible counties and will be setting dates to meet with eligible communities to discuss their proposals. Criteria such as the readiness of proposed project(s) and the community's capacity to undertake their proposed project(s) will be evaluated. These meetings may be scheduled within the next two weeks. Following this meeting, ODOC will finalize the amounts that will be allotted for each proposal and notify each community/county. It is unknown at this time when those final allotment determinations will be made.

A map depicting the project areas is attached.

**Cleveland County/City of Norman
Natural Disaster Area Overview**





Sanitation Services – Recycling Program

Recycling Statistics

- New curbside recycling program began the week of August 5, 2013
- Average program participation rate (81%) is more than double the average for the past 5 years
- Average monthly materials collected are up 33% since the new program began
- The City is currently collecting about 430 tons of recycling materials every month
- Recycling Drop-Off Center collections are down 35% since the new recycling program began

Because of these new volume amounts, the Utilities Department is currently evaluating options related to drop off recycling collections. This includes analysis of the operations of current sites and locations for any future centers to evaluate how to best rebalance the drop off collection efforts.

A Quick Refresher: Portfolio 13 vs. Portfolio 14

| | Lake Thunderbird Allocation | Existing Groundwater Wells | New Groundwater Wells | Conservation & Non-potable Reuse | Lake Thunderbird Augmentation | Regional Supplies via Oklahoma City |
|-----------------------------------|-----------------------------|----------------------------|-----------------------|----------------------------------|-------------------------------|-------------------------------------|
| P13 Regional OKC | 6 | 8 | | 2 | | 13 |
| P14 Wells + TBird Aug. | 6 | 8 | 2 | 2 | 11 | |

Values are 2060 Annual Avg. Use (mgd)

Ad-hoc Committee and Public Meeting Feedback

PORTFOLIO 13:

Regional Supply with OKC

- Interest in maintaining access to this supply in the future
- More “resilient” to climate change, avoids “all eggs in one basket” (Lake Thunderbird)
- Potential loss of local control over supply
- Public acceptance of future Sardis / Kiamichi diversions
- Concerns over size of up-front investment
- Tribal litigation/mediation

PORTFOLIO 14:

New Wells and Lake Thunderbird Augmentation

- Provides local control of supply
- Efficient use of resources
- Better phasing potential
- Downstream water right impacts
- Public acceptance & outreach
- Uncertainty in discharge water quality requirements
- Concerns about impacts of reuse on Lake Thunderbird (capacity and water quality)
- Potential Midwest City and Del City water quality concerns

Ad-Hoc Committee + Public Feedback Suggest Portfolio 14 May be Best Fit for Norman

P14 is more consistent with our community values

Treatment can meet our goals in either portfolio

Local management with P14 better meets our environmental stewardship goals

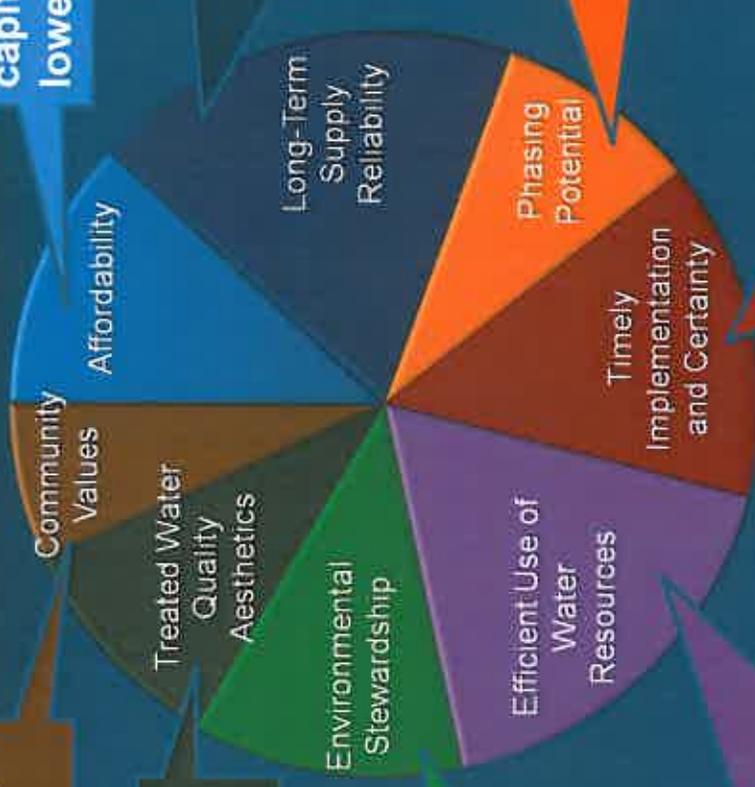
P14 makes full use of effluent from water reclamation facility vs. "wasting" a valuable resource by discharging it to North Canadian River

Portfolio 14 has lower capital costs and slightly lower O&M costs

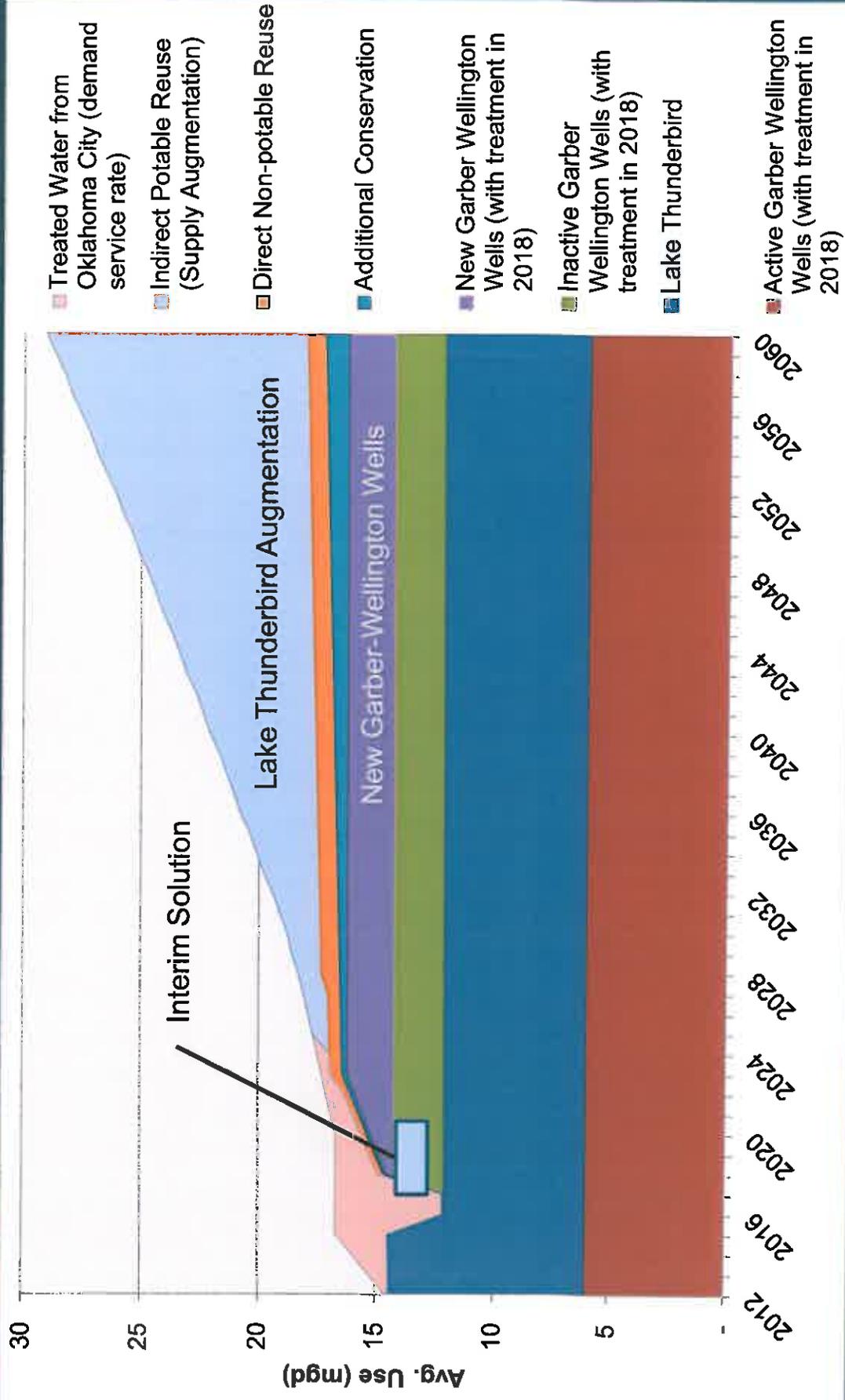
Both Portfolios can meet our long-term supply needs; Potential reliability concerns with long pipeline in P13

P14 has can be phased in with new wells and phased capacity for Lake Thunderbird augmentation

P14 has local control and management of our water resources vs. P13 shared control with OKC



Phased Capacity Increases to Meet Demand: Portfolio 14

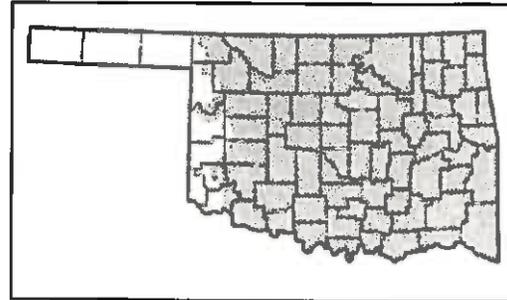




FAQs about Eastern Redcedar

What is Eastern redcedar?

Eastern redcedar (*Juniperus virginiana*) is an evergreen tree species native to 39 states and all but four of Oklahoma's 77 counties. The range map shown here is from Forest Trees of Oklahoma, a book on the state's native trees updated in 1981 by Dr. Elbert L. Little, former Chief Dendrologist with the USDA Forest Service. In October 1927, the Oklahoma Forest Commission published the first tree book and noted that *redcedar was scattered throughout the state*. One of the oldest trees in Oklahoma, estimated to be more than 500 years old, is a redcedar found near Lake Keystone northwest of Tulsa.



Why is eastern redcedar taking over? Where did all these trees come from?

Eastern redcedar is spreading for a number of reasons, including the lack of fire on the landscape, the species' adaptability and changes in land use and management following European settlement.

Eastern redcedar is very susceptible to fire, especially when small. Prior to settlement, lightning-caused fires or fires set intentionally by Native Americans swept frequently across forest and plain. These periodic fires restricted the spread of eastern redcedar, confining them to canyons, limestone outcrops or other places where fire intensity was low.

With settlement, widespread burning became less frequent, which allowed redcedar seedlings to become more numerous, and grow larger and more resistant to control. Increasing development in urban and wildland-urban interface areas (where the city meets the country), brought demands for improved fire protection further limiting fires' spread. Today, smaller ownership sizes, plus the increased risks associated with burning, have limited the use of prescribed fire as a management tool. Each of these influences has contributed to expansion of redcedar on the landscape.

Redcedars are also prolific seeders, with the male pollen-producers and the female seed-producers being on separate trees. A variety of bird species use the berries for food. As the fruit works its way through their digestive system, the seed is primed for germination when it hits the ground. This is one reason why redcedars are commonly found in fencelines, under powerlines, under large trees and in other places where birds congregate.



The photo compares a **managed** pasture with unmanaged land overrun with redcedars.

Another reason why this species is proliferating is the large shift in land use and ownership objectives from active management to a passive management style, especially around population centers. Redcedars are easy to control when small, through burning, cutting, mowing or other relatively inexpensive land management practices. However, on lands that are not actively used or managed, such as those held for investment or purely recreational purposes, it is not surprising to see redcedar taking over.

I know that cedars invading rangelands and pastures are a problem, but how do they affect forests and woodlands, such as the Cross Timbers of central Oklahoma?

Redcedar encroachment into woodlands and riparian forest areas is a legitimate forestry concern. This species can out-compete and eventually displace oaks, cottonwoods and other tree species. As they proliferate in woodlands, they shade out seedlings and saplings of the more desirable species. As they grow under the desirable trees, they increase the fire risk and cause greater mortality if a wildfire burns through.



What are the best ways to control eastern redcedar?

In the days when large cattle ranches were the norm, a machete was the tool of choice. As you rode the range or checked your fencelines on horseback, it was easy to stop and cut a pesky redcedar before it got too big. Periodic burning of the range was also effective, and was often done in coordination with your neighbors.

Today, the best methods depend upon the average size of the trees, the density per acre and site conditions. Using a machete, saw, loppers or similar tools to cut small trees is still very effective, but it requires discipline, vigilance and some work! Prescribed burning is often the cheapest and most effective practice. Burning works best on trees less than 4 to 5 feet tall, and should be repeated every few years. Redcedars will die and not resprout if all green foliage from top to bottom is 'toasted' or cut. In areas with larger trees, or in closed canopies (such as in the photo at right) where there is not enough grassy fuel to carry a hot enough fire, burning alone will not be very effective.



Prescribed fire requires careful planning and execution under fairly specific weather conditions, so seek expert help in this area unless you are experienced or have been trained in prescribed burning. Some counties have prescribed burn associations where property owners assist each other with burning. For more information, visit www.oklahomaprescribedfirecouncil.okstate.edu.

Mowing of pastures and open areas can be effective, but must be repeated periodically to control trees while small. Cutting larger trees with a pruning saw, loppers or chainsaw is also effective, but is labor-intensive. Cutting redcedars as close to the ground as possible, below all green foliage, is necessary to prevent resprouting.

Large trees require the use of mechanized equipment, such as tree shears, bulldozers, mulching machines or similar devices. Although a few herbicides can control redcedar, they are expensive and their use is uncommon.

How can the State help me control eastern redcedar on my land?

Before a natural resource professional can advise you on what is needed you should consider your personal objectives for owning your property. Lands and natural resources can be managed using various conservation practices that will provide a variety of benefits to you as the owner.

Oklahoma Forestry Services (OFS) can provide free technical assistance to you if your ownership objectives are for forest or woodland improvement purposes, or you wish to use trees to provide positive environmental benefits. For more information, contact the OFS forester assigned to your county (www.forestry.ok.gov/county-contacts).

OFS also can conduct a prescribed burn on private and public lands being managed for forestry-related objectives under the guidance of a Forest Stewardship Plan or other approved forest management plan (currently crews are only available to provide this service east of I-35). Prescribed burn services are fee-based and require significant planning prior to implementation. More information on OFS' Prescribed Burn Program can be found at <http://www.forestry.ok.gov/rxfire-ofs-assistance> or you can contact your local forester.

If your objectives are for agricultural production, such as rangeland and pasture improvement, you're better off contacting the Natural Resources Conservation Service (NRCS) (<http://offices.sc.egov.usda.gov/locator/app?service=page/CountyMap&state=OK&stateName=Oklahoma&stateCode=40>) or your local Conservation District (http://www.ok.gov/conservation/Directory/Directory_of_Conservation_District_Offices/).

Are there any cost-share programs available for eastern redcedar removal?

OFS currently has no cost-share funding available for redcedar control practices. Limited federal cost-share funding may be available to agricultural producers in some counties where local conservation boards rank redcedar control as a high priority practice. Although redcedar encroachment is considered one of the state's top conservation problems, the funding available for its control is limited and will depend upon local priorities and State or Congressional appropriations. The best source of information about financial assistance programs for redcedar control is your local Conservation District and NRCS office.

OFS does maintain three directories, accessible through our website, that are intended to bring landowners together with harvesters and wood producers. These directories have nothing to do with government financial assistance programs. Their primary purpose is to try and stimulate eastern redcedar market development, creating jobs and improving local economies.

Who can remove my eastern redcedar?

For property owners unable to tackle this work themselves or without access to family members or volunteers, there are private businesses with tree-cutting equipment that you can engage. If your objective is to cut and/or remove smaller trees from pastures and prairies, your local conservation district office may have a list of private vendors that are available in your area.

If you have a lot of large redcedar trees that could be harvested and used for wood products, your best bet is to contract with a cedar harvester. Those businesses can be found on the OFS website at www.forestry.ok.gov/ercregistry. Rather than charging you a cost for cutting your trees, you may be able to negotiate a sale of the merchantable wood that will provide you some income or at least offset some of the costs for removing the smaller trees. In these commercial operations, expect the logger to remove only trees which will "pay their way out of the woods" rather than cutting and removing everything. To get small or otherwise non-merchantable trees removed, you will most likely have to pay.

What do most people want to do with eastern redcedar on their lands?

Most Oklahomans who contact OFS are looking for ways to eradicate eastern redcedar, and might not realize it could have value or another use.

What will it cost to remove eastern redcedars from my property?

Cost depends on many factors and can range from \$20 to \$25 per acre for prescribed burning to several hundred dollars per acre for mechanical methods. Some operators charge by the acre and others by the hour. Allowing the harvester to keep trees they can sell to a wood-processing plant should reduce your treatment cost somewhat. Use a written contract between the owner and the operator, so all parties clearly understand what is expected. And be sure and include protection of water quality using forestry best management practices as one contract condition.

What about the trees planted in the shelterbelts in the 1930s?

Redcedars were an important component of early shelterbelt plantings in western Oklahoma because of their ability to survive under harsh growing conditions. These plantings were typically used to protect crops and livestock on *working* agricultural lands. As a result, commonly used land management practices, such as plowing, disking and mowing, destroyed the small redcedar seedlings and limited their spread considerably.

Do they really explode during a wildfire? Should I cut down the tree in my front yard to keep it from bursting into flames?



Note redcedar trees on left side of photo with lower limbs that were removed prior to a wildfire.

Redcedar foliage contains volatile oils that can be highly flammable when dry. These trees tend to keep their branches all the way to the ground, increasing the likelihood that a surface fire can become a crown fire when a fire approaches. Although TV coverage may give the impression of trees actually exploding and showering burning debris in all directions, what you are actually seeing are burning embers carried by wind currents, sometimes for considerable distances. Redcedars do increase the complexity of fighting a wildfire when they are present for this reason. However, cutting down a redcedar tree in your yard in town makes no sense. The likelihood of it being involved in a wildfire is minimal, and the enjoyment that tree gives you makes it worth keeping.

If you live in a rural area or in the wildland-urban interface where there is a risk of wildfire, property owners should follow the guidelines in the Firewise program. Creating a *defensible space* around your home may help it survive a wildfire in case firefighters do not arrive in time. Removing flammable fuels close to the home, keeping shrubs and trees of all kinds trimmed and thinned, cutting grassy fuels short and watered are a few of the simple practices that might help your home survive and make you feel more comfortable living in Oklahoma's fire-prone environment. Information about Firewise is found on the OFS website at www.forestry.ok.gov/firewise.

What will happen to the dead trees from a fire or cutting operation?

Redcedar is very resistant to decay, which is one reason they make excellent fence posts that may last for decades. Standing trees killed by a fire will often remain as 'skeletons' for many years. Trees that are cut and left in place, or are piled or windrowed, will also last a long time so a follow-up prescribed burn or mulching operation may be needed.

What does the Eastern Redcedar Registry Board do? When do they meet and who is involved?

The State Legislature created the Eastern Redcedar Registry Board in 2010 for the purpose of finding and promoting ways to slow the spread of redcedar and creating economic development opportunities for the industry. The Board consists of members appointed by the Governor, President of the Senate and Speaker of the House, as well as specific members named in the legislation. They meet approximately on a bimonthly basis. More information about the Eastern Redcedar Registry Board, as well as meeting agendas when posted, can be found at <http://www.forestry.ok.gov/ercregistryboard>.

How are the redcedar registries/directories used? How often are they updated? Did you receive my information, because it hasn't shown up online?

Forestry Services created these registries to offer an open forum that brings together (1) landowners with trees they want to remove, (2) harvesters and loggers with the equipment and capability of harvesting trees, and (3) businesses that use redcedar to manufacture wood products. These registries do not include listings from businesses whose primary purpose is to cut down trees and clear land, especially for range or pasture improvement. If your primary business is land clearing and you previously submitted a form we suggest you contact the local NRCS or Conservation District offices in areas where you are willing to work and request to be listed as a vendor for this type of practice.

It is up to the individuals and businesses on the three redcedar directories to make the appropriate contacts and work out the details in a free market environment. Being listed on one or more of these directories has no relationship to being qualified for financial assistance or other state services.

OFS updates the registries quarterly. Depending upon when you complete the form, it could be some time before your information appears on the website. Each directory is dated when made current, so if your entry is still missing after a quarterly update, you can reenter your data or contact us.

What is Oklahoma Forestry Services' role concerning the issues associated with redcedar in the state?

Forestry Services' mission is to conserve, enhance and protect Oklahoma's forest resources for present and future generations. Our services that are relevant to redcedar primarily concern forest resource protection, assistance to communities and technical forestry assistance to landowners. OFS is the agency assigned primary responsibility for wildland fire management and suppression in the state. In eastern Oklahoma's 6.2 million acre 'initial attack area,' OFS fire protection personnel and equipment take action on more than 1,500 wildfires annually. Outside of this area, OFS fire protection resources act in support of local fire departments and the Office of Emergency Management. OFS crews are highly trained in suppressing wildfires using tactics and techniques appropriate to the situation, including the presence of redcedars.

OFS also raises public awareness of the Firewise program, to help people reduce their fire risk and create defensible space around their rural or interface homes. OFS is assisting many communities across the state in developing and implementing Community Wildfire Protection Plans so that local citizens are better prepared for wildfires.

OFS professional foresters are available in 14 offices across the state to provide information and technical assistance to landowners concerning the management and utilization of their forest resources. Provided that an owner's objectives are for forestry purposes (timber production, forest health, forest water quality, wildlife habitat improvement, tree planting and similar purposes) advice on redcedar control may be appropriate. Foresters will also work with the landowner to develop a long-range forest management plan that includes specific recommendations for practices that will help an individual's property meet their ownership objectives.

If cedars are taking over my land, what should I do first?

If you only have a little time and energy to help control redcedars on your own property, focus first on the large seed-bearing female trees and the small seedlings. Controlling small trees may be time-consuming but is not difficult, and will prevent them from becoming large trees that are costly to control. Removing the female trees will help with a "slow the spread" approach by reducing the amount of seed that the birds can distribute. And don't worry, the birds won't starve. Whatever you decide to do, stick with it! Controlling redcedars is not a one-time proposition, but requires property owners to become active managers of their lands.

Overall, your first consideration should be to determine what you would like your land to do for you - establish clear ownership objectives. Once you have completed this step, it is best to contact a natural resources professional for guidance on how to determine whether redcedars are limiting your ability to achieve your objectives. This might include some basic information to get you started, a field visit and on-site technical recommendations, a long-range land management plan or other assistance. If your objectives are related to agricultural production, rangeland or pasture improvement, then contact your local NRCS or Conservation District office.

If your objectives are related to improvement of your forests and woodlands, and finding ways to take greater advantage of nature's benefits on your lands, then Forestry Services is available to help you.

www.forestry.ok.gov