GWPC AGENDA:
THURSDAY, JUNE 30, 2022, 2:30 P.M.
THE GARBER-WELLINGTON ASSOCIATION POLICY COMMITTEE WILL HOLD A REGULAR MEETING ON THURSDAY, JUNE 30, AT ACOG IN THE OKLAHOMA BOARD ROOM, 4205 N. LINCOLN BLVD., OKLAHOMA CITY, OKLAHOMA.

PLEASE NOTIFY ACOG AT 405-234-2264 (TDD/TTY CALL 7-1-1 STATEWIDE OR EMAIL title.vi@acogok.org) BY 5 P.M. MONDAY, JUNE 27, IF YOU REQUIRE ACCOMMODATIONS PURSUANT TO THE AMERICANS WITH DISABILITIES ACT OR SECTION 504 OF THE REHABILITATION ACT.

AGENDA

1. CALL TO ORDER (ATTACHMENT 1)

2. APPROVAL OF APRIL 28, 2022 MINUTES (ATTACHMENT 2)

3. STAFF REPORT: John Harrington, Water Resources Director
   For information only.
   
   A. DROUGHT UPDATE (ATTACHMENT 3-A)
   
   B. SANDSTONE MAPPING UPDATE (ATTACHMENT 3-B)
   
   C. PROPOSED 604(b) PROJECTS (ATTACHMENT 3-C)

4. PROGRESS REPORT: John Harrington, Water Resources Director (ATTACHMENT 4)
   For information only.

5. NEW BUSINESS

6. ADJOURNMENT

NEXT MEETING:
August 25, 2022 at 2:30 p.m.
<table>
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<tr>
<th>CITY/ORGANIZATION</th>
<th>MEMBERS</th>
<th>ALTERNATES</th>
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<tr>
<td>BETHANY</td>
<td>Hon. Nikki Lloyd, Mayor</td>
<td>Hon. Chris Powell, Vice-Mayor</td>
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<td>Hon. Kathy Larsen, Councilmember</td>
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<td>CALUMET</td>
<td>Hon. Terry Drungardt, Trustee</td>
<td>Hon. Bruce Wallace, Mayor</td>
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<td>CHOCTAW</td>
<td>Hon. Chad Williams, Councilmember</td>
<td>Hon. Jeannie Abts, Councilmember</td>
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<td>CRESCENT</td>
<td>Hon. Jim Neal, Councilmember</td>
<td>Hon. Greg Cummings, Mayor</td>
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<td>DEL CITY</td>
<td>Hon. Floyd Eason, Mayor</td>
<td>Hon. Pam Finch, Vice-Mayor</td>
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<td>Hon. Michael Dean, Councilmember</td>
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<td>EDMOND</td>
<td>Hon. Josh Moore, Councilmember</td>
<td>Hon. Darrell Davis, Mayor</td>
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<td>EL RENO</td>
<td>Hon. Matt White, Mayor</td>
<td>Hon. Tim Robinson, Councilmember</td>
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<td>FOREST PARK</td>
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<td>GEARY</td>
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<td>Hon. Bobby Allen, Mayor</td>
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<td>GOLDSBY</td>
<td>Hon. Glenn Berglan, Mayor</td>
<td>Hon. Russ McReynolds, Trustee</td>
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<td>GUTHRIE</td>
<td>Hon. Steven J. Gentling, Mayor</td>
<td>Hon. Jeff Taylor, Councilmember</td>
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<td>HARRAH</td>
<td>Hon. Tim Rudek, Councilmember</td>
<td>Hon. Chris Lally, Councilmember</td>
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<td>JONES CITY</td>
<td>Hon. Ray Poland, Mayor</td>
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<td>LANGSTON CITY</td>
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<td>Hon. Linda Williams, Trustee</td>
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<td>LEXINGTON</td>
<td>Hon. Mike Donovan, Councilman</td>
<td>Hon. Max Punneo, Vice-Mayor</td>
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<td>Hon. William T. Arps, Mayor</td>
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<td>Hon. Carla Caruthers, Trustee</td>
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<td>MIDWEST CITY</td>
<td>Hon. Matt Dukes, Mayor</td>
<td>Hon. Pat Byrne, Vice-Mayor</td>
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<td>MOORE</td>
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<td>MUSTANG</td>
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<td>Hon. Michael Ray, Councilmember</td>
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<td>NICHOLS HILLS</td>
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<td>NICOMA PARK</td>
<td>Hon. Mark Cochell, Mayor</td>
<td>Hon. Mike Czerczyk, Vice-Mayor</td>
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<td>NOBLE</td>
<td>Hon. Phil Freeman, Mayor</td>
<td>Hon. Ezra Roesler, Vice-Mayor</td>
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<td>Hon. Breea Clark, Mayor</td>
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<td>Hon. Jeff Brueggen, Trustee</td>
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<td>Hon. Todd Stone, Councilmember</td>
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<td>Hon. Melissa Ashford, Councilmember</td>
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<td>Hon. Austin Redus, Councilmember</td>
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<td>Hon. Eugene Dickson, Mayor</td>
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<td>Hon. Frank Calvin, Mayor</td>
<td>Hon. Charmin Williams, Vice-Mayor</td>
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<td>THE VILLAGE</td>
<td>Hon. Sonny Wilkinson, Mayor</td>
<td>Hon. Adam Graham, Vice-Mayor</td>
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<td>TUTTLE</td>
<td>Hon. Mary Smith, Vice-Mayor</td>
<td>Hon. Austin Hughes, Councilmember</td>
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<td>UNION CITY</td>
<td>Hon. Charlie Ross, Vice-Mayor/Trustee</td>
<td>Hon. Bob McGregor, Trustee</td>
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<td>WARR ACRES</td>
<td>Hon. Jim Mickley, Mayor</td>
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<td>Hon. John Knipp, Councilmember</td>
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<td>YUKON</td>
<td>Hon. Shelli Selby, Mayor</td>
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<td>CANADIAN COUNTY</td>
<td>Hon. Marc Hader, Commissioner</td>
<td>Hon. Jack Stewart, Commissioner</td>
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<td>Hon. David Anderson, Commissioner</td>
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<td>CLEVELAND COUNTY</td>
<td>Hon. Rod Cleveland, Commissioner</td>
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<td>Hon. Harold Haralson, Commissioner</td>
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<td>LOGAN COUNTY</td>
<td>Hon. Kody Ellis, Commissioner</td>
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<td>Hon. Carrie Blumert, Commissioner</td>
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<td>Hon. Kevin Calvey, Commissioner</td>
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SUBJECT:
MINUTES OF THE GARBER-WELLINGTON ASSOCIATION POLICY COMMITTEE MEETING

DATE:
APRIL 28, 2022

The regularly scheduled meeting of the Garber-Wellington Association Policy Committee was convened at 2:31 p.m. on April 28, 2022 in the Association of Central Oklahoma Governments (ACOG) Board Room, 4205 N. Lincoln Boulevard, Oklahoma City, Oklahoma. The meeting was held as indicated by a notice filed in advance with the Oklahoma County Clerk and by notice posted at the ACOG offices at least twenty-four hours prior to the meeting.

PRESIDING
Hon. Matt Dukes, Secretary-Treasurer

CITY/AGENCY
Midwest City

POLICY COMMITTEE MEMBERS PRESENT IN-PERSON
Hon. Terry Brungardt, Trustee
Hon. Chad Williams, Councilmember
Hon. Josh Moore, Councilmember
Hon. Tim Rudek, Councilmember
Hon. Brian Grider, Vice-Mayor
Hon. Phil Freeman, Mayor
Hon. John Koehler, Trustee
Hon. Mary Smith, Vice-Mayor
Hon. Roger Godwin, Councilmember
Hon. Shelli Selby, Mayor
Hon. Marc Hader, Commissioner

POLICY COMMITTEE MEMBERS ABSENT
Hon. Nikki Lloyd, Mayor
Hon. Floyd Eason, Mayor
Hon. Matt White, Mayor
No Designee
Hon. Warren G. Carter, Councilmember
Hon. Glenn Berglan, Mayor
Hon. Steven J. Gentling, Mayor
No Designee
Hon. Mike Donovan, Councilmember
Hon. Terry Arps, Mayor
Hon. Mark Hamm, Councilmember
Hon. Peter Hoffman, Mayor
Hon. Mark Cochell, Mayor
Hon. Breea Clark, Mayor
Hon. Joe Frisby, Trustee
Hon. Todd Stone, Councilmember
No Designee
Hon. Frank Calvin, Mayor
Hon. Sonny Wilkinson, Mayor

Calumet
Choctaw
Edmond
Harrah
Mustang
Noble
Slaughterville
Tuttle
Warr Acres
Yukon
Canadian County

Bethany
Del City
El Reno
Forest Park
Geary
Goldsby
Guthrie
Langston City
Lexington
Luther
Moore
Nichols Hills
Nicoma Park
Norman
Okarche
Oklahoma City
Piedmont
Spencer
The Village
1. CALL TO ORDER

Presiding Matt Dukes, Secretary-Treasurer, called the meeting to order at 2:31 p.m.

2. APPROVAL OF MINUTES – APRIL 28, 2022

Director John Koehler, Slaughterville, made a motion to approve the Garber-Wellington Association Policy Committee minutes. Director Josh Moore, Edmond, seconded the motion. The motion carried unanimously.

3. STAFF REPORT

A. DROUGHT UPDATE

Spring 2022 is starting out cold and dry. An exceptional drought that covered the Panhandle has now spread eastward into the western one-third of the state.

Although the beginning of February saw a record snowfall, this translated into little or no real moisture overall. Most of Central Oklahoma shows at least 30 days since significant (>0.25”) rainfall has been recorded. The Oklahoma Panhandle is beginning to experience dust storms; Kenton, OK has experienced 233 days since the last rain.

Recharge to the aquifer has been essentially zero since last July. Static water levels recorded at the Spencer Mesonet station are starting to retreat now from the decade high.

La Niña effects will continue to affect us for the short term. Long term models suggest that La Niña will last through the end of the year.

B. SANDSTONE MAPPING UPDATE

The multi-year sandstone mapping project funded by the 2019 604(b) grant will wrap up in April 2022. The 2019 604(b) project in the Edmond area extends the previous 2018 604(b) work northward.

All eight cross-sections have been completed. About 455 wells have been correlated in this project. Some of the cross sections go through the Nichols Hills and Edmond well fields.
Sand thickness (isopach) maps are being generated. The maps extend the north-trending drilling area in the Town of Jones City and City of Choctaw.

The U.S. Environmental Protection Agency has approved the 2020, 604(b) (Guthrie and Purcell Areas) Quality Assurance Project Plans.

C. NORTH CANADIAN RIVER PROJECT – STATE ARPA APPLICATION

ACOG has applied for the State allocated American Rescue Plan Act (ARPA) funding to develop the North Canadian River Dissolved Oxygen Model. This project is a basin-wide approach for a wasteload allocation study on the North Canadian River in Canadian, Oklahoma, and Pottawatomie Counties in Central Oklahoma.

Like a previous ACOG wasteload allocation study on the Canadian River to the south, the study will develop a mathematical model that will accurately simulate water quality in the streams under critical conditions. This model will then be used to generate simulations for the purpose of determining appropriate permit limits for point source discharges on the river.

As in the previous Canadian River study, the participants in the study will be the municipalities which are dischargers to the North Canadian River. This includes Oklahoma City, Midwest City, Del City, Choctaw, Harrah, El Reno, Town of Jones City, Yukon, and Shawnee. Most of these entities are members of ACOG, a substate 208 agency.

Associated agencies which will review the project are the Oklahoma Department of Environmental Quality (ODEQ) and the US Environmental Protection Agency (EPA). The proposed budget will be $1.5 million for the three-year project.

4. PROGRESS REPORT

John Harrington pointed out that the progress report was available for review in the agenda.

5. NEW BUSINESS

None

6. ADJOURNMENT

There being no further business, the meeting adjourned at 3:06 p.m.
SUBJECT: DROUGHT UPDATE

DATE: JUNE 30, 2022

FROM: JOHN HARRINGTON
Water Resources Director

INFORMATION:
May and June have provided much needed rain to Oklahoma! Central Oklahoma has received at least 10 inches of rain in the past two months. This has pushed drought to the west of I-35 and has diminished the drought intensity in the Panhandle and western Oklahoma.

Mean recharge to the aquifer for May was 0.7 inches overall. Eastern Oklahoma County received most of the recharge. This was essentially the first recharge event since June 2021 and was about a third of a normal year’s recharge in one month.

La Niña effects will continue to affect us for the short term. Long term models suggest that La Niña is decreasing in strength, with possible neutral conditions by late summer 2022.

ACTION REQUESTED:
For information only.
SUBJECT: SANDSTONE MAPPING UPDATE

DATE: JUNE 30, 2022

FROM: JOHN HARRINGTON
Water Resources Director

INFORMATION:
The multi-year sandstone mapping project funded by the 2019 604(b) grant wrapped up in April 2022. The 2019 604(b) project in the Edmond area extended the previous 2018 604(b) work northward.

Eight cross-sections were completed. About 455 wells have been correlated in this project. Some of the cross sections go through the Nichols Hills and Edmond well fields. Sand thickness (isopach) maps were generated. The maps extend the north-trending drilling area in the Town of Jones City and the City of Choctaw.

The U.S. Environmental Protection Agency has approved the 2020, 604(b) (Guthrie and Purcell Areas) Quality Assurance Project Plans. The EPA has also received the Quality Assurance Project Plan (QAPP) for the 2021 604(b) project which will focus on integrating the sandstone mapping projects into an aquifer-wide integrated map and geologic model.

ACTION REQUESTED:
For information only.
SUBJECT: PROPOSED 604(b) PROJECTS

DATE: JUNE 30, 2022

FROM: JOHN HARRINGTON
Water Resources Director

INFORMATION:

Two Projects are being proposed this year for the ACOG 604(b) grant program.

**22604(b) - Effects on Aquifer Recharge from the Proposed Turnpike in Norman.**
The proposed Turnpike will run through a major portion of the nonurban recharge area of the Garber-Wellington aquifer in the City of Norman. Although the route at present is mostly rural, inevitable urbanization will likely take place along the route. This usually results in hardened surfaces such as parking lots and roofing along the route, resulting in less recharge to the aquifer and more overland flow into the watershed. Less recharge may affect the water table for domestic and municipal supplies and may also affect or downgrade potential drilling areas for additional well fields in the aquifer.

**22604(b) BIL - Source Tracking for Bacteria - North Canadian River**
Pathogens that are the result of human activities are often associated with sewerage, which may contain many sources of fluorescent dyes. These dyes can be found in many paper products such as toilet paper, or with common soaps and detergents.

The main objective of this project is to substantiate the relationship between flow, fluorescence, and pathogen concentrations in the North Canadian River and several major tributaries for purposes of determining human generated sources for pathogens. This project would continue the decadal ACOG sampling of bacteria in the urban corridor and watersheds of the North Canadian River.

This project will be different from the 2011 study with the aspect that the bacteria samples will be subject to UV light before the application of the fluorometer. This will also be supporting the proposed North Canadian ARPA project.

**ACTION REQUESTED:**
For information only.
SUBJECT: PROGRESS REPORT

DATE: JUNE 30, 2022

FROM: JOHN HARRINGTON
Water Resources Director

INFORMATION:

ACOG Drought Program
May and June have provided much needed rain to Oklahoma! Central Oklahoma has received at least 10 inches of rain in the past two months. This has pushed drought to the west of I-35 and has diminished the drought intensity in the Panhandle and western Oklahoma.

Mean recharge to the aquifer for May was 0.7 inches overall. Eastern Oklahoma County received most of the recharge. This was essentially the first recharge event since June 2021 and was about a third of a normal year’s recharge in one month. La Niña effects will continue to affect us for the short term. Long term models suggest that La Niña is decreasing in strength, with possible neutral conditions by late summer 2022.

Since the last progress report, two monthly drought reports have been generated.

19604(b) - Stratigraphic Mapping Garber-Wellington Aquifer Northern Oklahoma County
The multi-year sandstone mapping project funded by the 2019 604(b) grant wrapped up in April 2022. The 2019 604(b) project in the Edmond area extended the previous 2018 604(b) work northward.

Eight cross-sections were completed. About 455 wells have been correlated in this project. Some of the cross sections go through the Nichols Hills and Edmond well fields. Sand thickness (isopach) maps were generated. The maps extend the north-trending drilling area in the Town of Jones City and the City of Choctaw.

20604(b) - Stratigraphic Mapping Garber-Wellington Aquifer Guthrie Area
As part of the 20604 604(b) grant, staff will continue and extend net sand maps created in the 18604(b) and 19604(b) projects into southern Logan County and southern Cleveland County. This effort will allow drillers to focus their efforts in areas with more sandstone, thus increasing well capacity. This project commenced in late April 2022.

21604(b) - Geologic Modeling Garber-Wellington Aquifer
The FY 18-20 604(b) mapping projects produced cross-sections and net sand isopach maps for most of the aquifer. These mapping programs utilized the Quaveo GMS database structure, which integrates the GIS capabilities of ArcGIS with MODFLOW. To achieve an aquifer-wide database coverage and geologic model, additional data from the 2016 Norman area project must be integrated into the GMS database structure.

A geologic model for the entire aquifer will be produced, which can then be integrated into the groundwater models generated by the FY 2013-16 604(b) projects.
This project proposal has been approved by EPA as part of the 21604(b) grant program. The EPA has also received the Quality Assurance Project Plan (QAPP) for the FY 2021 604(b) project.

22604(b) - Effects on Aquifer Recharge from the Proposed Turnpike in Norman.
The proposed Turnpike will run through a major portion of the nonurban recharge area of the Garber-Wellington aquifer in the City of Norman. Although the route at present is mostly rural, inevitable urbanization will likely take place along the route. This usually results in hardened surfaces such as parking lots and roofing along the route, resulting in less recharge to the aquifer and more overland flow into the watershed. Less recharge may affect the water table for domestic and municipal supplies and may also affect or downgrade potential drilling areas for additional well fields in the aquifer.

The workplan proposal was sent to the Office of the Secretary of Energy and Environment (OSEE) and EPA in May 2022.

22604(b) BIL - Source Tracking for Bacteria - North Canadian River
The main objective of this project is to substantiate the relationship between flow, fluorescence, and pathogen concentrations in the North Canadian River and several major tributaries for purposes of determining human generated sources for pathogens. This project would continue the decadal ACOG sampling of bacteria in the urban corridor and watersheds of the North Canadian River and to apply fluorometry as a tool to address sources.

This project will be different from the 2011 study with the aspect that the bacteria samples will be subject to UV light before the application of the fluorometer.

The workplan proposal was sent to the Office of the Secretary of Energy and Environment (OSEE) and EPA in May 2022.

North Canadian River Project – State ARPA Application
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Like a previous ACOG wasteload allocation study on the Canadian River to the south, the study will develop a mathematical model that will accurately simulate water quality in the streams under critical conditions. This model will then be used to generate simulations for the purpose of determining appropriate permit limits for point source discharges on the river.

As in the previous Canadian River study, the participants in the study will be the municipalities which are dischargers to the North Canadian River. This includes Oklahoma City, Midwest City, Del City, Choctaw, Harrah, El Reno, Town of Jones City, Yukon, and Shawnee. Most of these entities are members of ACOG, a substate 208 agency.

Associated agencies which will review the project are the Oklahoma Department of Environmental Quality (ODEQ) and the US Environmental Protection Agency (EPA). The proposed budget will be $1.5 million for the three-year project.

**ACTION REQUESTED:**
For information only.