

Georgia EPD  
Drought Management Rule  
Stakeholder Meeting #1  
May 13, 2014

NOTE: DRAFT AS OF May 1, 2014



# Welcome & Introduction

- Overview and Purpose of Stakeholder Meeting
  - This meeting is responsive to OCGA § 12-5-7 and § 12-5-8 and other Georgia Code sections charging EPD with the responsibility to ensure that water resources are responsibly conserved
  - EPD is holding this stakeholder meeting to:
    - Identify and inform stakeholders of rule changes that are under consideration;
    - Receive input from stakeholders
  - EPD requests that any input in response to this stakeholder meeting be submitted to EPD by June 3, 2014
  - EPD is not formally proposing any rule changes at this time
  - EPD anticipates holding a 2<sup>nd</sup> stakeholder meeting, with actual rough draft rule language, this summer
  - There is no set schedule for making any changes at this time
    - Proposed Rule in Fall of 2014 is a possibility
  - Any proposed rule changes in the future would involve public notice, public hearing, and opportunity to comment

# Welcome & Introduction

- Georgia's Inaugural Water Summit – February 26, 2014
- Governor Deal –
  - “...we must take the necessary steps to prepare even while the rivers are flowing high and fast. Drought planning must include a proactive approach to water resource management. This includes securing additional supply, conserving our existing water resources and in some cases, reducing our dependence on one source and shifting that demand to a more sustainable source.”



# Welcome & Introduction

- Agenda
  - Welcome & Introduction (Jac)
  - Summary of Applicable Statutory Language (Jac)
  - EPD Experience Managing Previous Droughts (Tim)
  - Concepts for Consideration in Drought Management Rule
    - Drought response committee; (Becky)
    - Drought indicators and triggers; (Becky)
    - Drought declaration process; (Becky)
    - Predrought mitigation strategies; (Becky)
    - Applicability (Nap)
    - Record Keeping, Reporting, & Baseline (Nap)
      - Water Usage (Nap)
    - Drought response strategies; (Tim)
    - Variance Procedures (Tim)
  - Wrap Up (Jac)

# Summary of Applicable Statutory Language

# § 12-5-8. Rules and regulations relating to drought management

- The DNR Board shall adopt new rules relating to drought management.
- Such rules shall include but not be limited to
  - Provisions for a drought response committee;
  - Drought indicators and triggers;
  - A drought declaration process;
  - State and local predrought mitigation strategies; and
  - Drought response strategies.
- Such predrought mitigation strategies shall be designed to minimize the potential effects of drought.
- Such drought response strategies shall be measures or actions to be implemented during various stages of drought.
- Such rules shall replace any previous drought management plan.
- Such rules shall be revised from time to time as the board deems appropriate.

## § 12-5-7. Local variances from state restrictions on outdoor watering; limitations on outdoor irrigation; exceptions

- (a)
  - (1) Any local government or authority may, upon approval by EPD for good cause shown, impose more stringent restrictions on outdoor water use during nondrought periods or state declared periods of drought.
  - (2) Emergency restrictions allowed w/out EPD approval up to 7 days
  - (3) If local government or authority is unable to satisfy reduced water consumption or other permit requirements under its water withdrawal or operating permit due to its inability to impose more stringent restrictions on outdoor water use they shall be exempt from fines, sanctions, or other penalties applicable for such failure upon the approval of EPD. They shall notify EPD within 10 days of such failure.
  - (4) EPD may revoke, suspend, or modify (3 day notice) local government or authority water withdrawal or waste treatment permit consistent with health, safety, and welfare for violation of paragraph (1) or (2) of this subsection or any variance granted.



## § 12-5-7. Local variances from state restrictions on outdoor watering; limitations on outdoor irrigation; exceptions

- (a.1)
  - (1) Persons may irrigate outdoors daily for purposes of planting, growing, managing, or maintaining ground cover, trees, shrubs, or other plants only between the hours of 4:00 P.M. and 10:00 A.M.
  - (2) Paragraph (1) of this subsection shall not create any limitation upon the following outdoor water uses:
    - (A)-(M) – List of protected outdoor watering functions with no restrictions such as Agricultural operations; Irrigation of athletic fields or golf courses; Irrigation of personal food gardens; Drip irrigation or irrigation using soaker hoses;

§ 12-5-7. Local variances from state restrictions on outdoor watering; limitations on outdoor irrigation; exceptions

- (b) Any local government or authority may request EPD, for good cause shown, to grant an exemption from nonstatutory outdoor watering restrictions or water use reductions imposed by the state if such restrictions, reductions, or both are not necessary and appropriate to avoid or relieve a local water shortage.
- (c) EPD shall make a decision on any request under subsection (a) or (b) of this Code section within five business days.
- (d) (1) Any permittee who is aggrieved or adversely affected by any order or action of EPD shall have a right to a hearing pursuant to Code Section 12-2-2.

# EPD Experience Managing Previous Droughts

# 2006 - 2009 Drought Management Strategy

- 2003 Drought Management Plan
  - Drought Declaration Process
  - Pre-Drought Strategies
  - Drought Responses
  - Drought Indicators and Triggers
- Rules for Outdoor Water Use, Chapter 391-3-30
  - Drought Response Levels I - IV

# 2006 - 2009 Drought Response

## Key Events

- June 2006 - Level I watering restrictions statewide
- April 2007 - Level II watering restrictions statewide
- September 2007 - June 2009 - Level IV watering restrictions in 55 north Georgia counties
- October 2007 - Drought Emergency Declaration

## Adaptive Modifications

- Permits modified requiring 10% reductions in Level IV area
- Detailed monthly water use reporting required for 113 surface water systems using >1.0 MGD
- Modified outdoor water use restrictions allowed for systems with adequate supplies
- Outdoor water use restrictions relaxed for highly efficient uses
- Worked closely with USACE to modify operations at Federal projects

# How successful was 2006 – 2009 drought response and what did we learn?

## Successes:

- 20% reduction in water use across the 55 county Level IV area during outdoor watering season
- 10% reduction in winter water use across the 55 county Level IV
- At-risk systems were protected
- Systems with better drought preparedness were able to take advantage of that preparedness

## Lessons Learned:

- Drought declaration process should be more flexible and targeted
- Water systems need discretion in how they achieve water use reductions
- Some water systems need help ensuring that adequate drought response measures can be implemented within their service areas
- Uniform water use recording and reporting during drought and non-drought is critical in monitoring the condition of water supplies and assessing performance
- Water systems dependent upon federal projects may not have control over their supplies during drought

# Concepts for Consideration in Drought Management Rule

# Pre-drought Mitigation Strategies

- Longer-term actions implemented *before* drought is declared
  - Some are we do every day already
  - New rule
    - *NOT* change or alter existing conservation measures requirements or new conservation measures developed independently from this rule



# Pre-Drought Mitigation Strategies – Input Requested

- Should pre-drought mitigation strategies be included?
- If so, what type of pre-drought mitigation strategies should be included?
  - Coordination with possibly affected permittees and public awareness actions
  - Documenting things we already require elsewhere to mitigate potential drought situations
  - New measures requiring affected permittees to take specific steps to mitigate potential drought situations over and above what they are already required to do
  - Others?
- Any other input related to pre-drought mitigation strategies

# Drought Indicators & Triggers

- Possible Approach
  - Director (or designees) shall monitor climatic indicators and water supply conditions.
    - Such indicators and conditions may include but not be limited to the following:
      - Precipitation, Streamflow, Groundwater, Reservoir Levels, Soil Moisture, Climate Predictions
- Other Possible Thoughts
  - Separate metrological drought vs hydrologic drought vs agricultural drought
  - Separate surface water drought from ground water drought
- Input Requested
  - Any input related to possible drought indicators & triggers

# Drought Declaration

- Possible Approach by Director
  - Based on climatic indicators and water supply conditions
    - May declare various drought levels for specific areas
      - Possibly 3 Different Levels (Level I, Level II, Level III)
      - Notice provided to those affected (How?)
    - May declare non-drought conditions after a drought has passed
  - More precise declaration – not meat clever approach
- Possible Alternatives:
  - Could differ for Surface Water vs. Ground Water users in a given area
  - Could be different for different geography
    - 9 climatic divisions
    - Regional Water Planning Regions
- Input Requested:
  - Any input related to possible drought declaration approaches



# Drought Response Committee

- Possible Approach
  - May be convened by Director to advise on drought response strategies.
  - May consist of representatives from various sectors at Director's discretion
    - Utilities
    - Elected Officials
    - Business and Industry
    - Agriculture
    - Green Industry
    - Other State & Federal Agencies
    - Water Professional Groups
    - Universities/Academics
    - Weather Professionals
    - Non-Profit Groups
    - Recreation
  - May be convened for time specified by the Director
- Input Requested:
  - Any input related to possible drought committee approaches

# Applicability

- Possible Approach:
  - Non-farm surface water & groundwater withdrawal permittees (i.e., >0.10 mgd) holding drinking water permit
  - Drinking water permittees (above population connections ~ 0.10 mgd) with no consideration given to non-farm withdrawal permit status.
- Possible Alternatives:
  - Non-farm SW & GW withdrawal permittees (~875), with no consideration given to DWP
  - Non-farm SW withdrawal permittees (~360) with no consideration given to non-farm GW withdrawal permittees (~514) unless use is from aquifer with demonstrable surface water connectivity.
  - Both non-farm sw & gw permittees and farm sw and gw permittees (~22,000).

# Applicability - Input Requested

- Who should be subject to this drought management rule
  - Type and size threshold
- If applicability is broad enough to include different types of water users (i.e., manufacturers [~310] vs public water systems [~567]), the commenter should assume that the drought response strategies could take those differences into account
- Other input related to applicability

# Record Keeping & Reporting

- Record Keeping
  - Monthly water use (non-drought)
    - Withdrawal amount from source (as per permit)
  - Monthly water use, or more frequently as required by the Director (drought)
    - Withdrawal amount from source
    - Amount Sold (to both wholesale and retail customers)
    - For wholesale customers, amount then sold to retail customers
- Reporting
  - Possible Approach
    - Non-drought (as per permit)
    - Drought (as directed by the Director)
  - Possible Alternative
    - Report monthly use consistent with permit requirement irrespective of drought/non-drought
- Input Requested

# Baseline

- Possible Approach
  - Highest average use for each calendar month for 24 consecutive months during last 5 years before declaration
    - Then compare month to month (i.e. compare January usage to the average of the two January's in the baseline period)
- Possible Alternatives
  - Highest average use for each calendar quarter for 8 consecutive quarters during last 5 years before declaration
    - Then compare quarter to quarter (i.e. compare 1<sup>st</sup> calendar quarter usage to the average of the two 1<sup>st</sup> calendar quarter's in the baseline period)
  - Others
- Input Requested
  - Any input related to approaches for calculating an appropriate water use baseline for assessing compliance with numeric water reduction levels



# Drought Response Strategies

- Possible Approach:
  - Numeric Water Use Reduction Levels based on Drought Severity Level (Baseline is important – addressed in later slide)
    - Numeric targets may be adjusted from that level based on: Water Loss Audit Results; or the Viability of the Water Supply
      - If target adjusts based on Water Loss Audit Results, how should we treat older systems vs. newer systems?
    - System would have flexibility to choose measures to achieve reduction levels (without having to get variance)
      - Likely to match the Drought Level specific mandated measures described below
    - If system fails to achieve numeric reduction levels, then must implement specific mandated measures
      - For example under OCGA 12-5-7(a.1)(1), instead of outdoor watering allowed from 4pm to 10am, window would be reduced based on drought severity level (I – 8pm to 8am, II – 10pm to 6am, III – none)
      - Some of the protected uses under OCGA 12-5-7(a.1)(2) could also be subject to additional requirements based on drought severity
    - Numeric targets may not be adjusted if water supply obtained from a project owned and operated by USACOE
  - So, water use reduction requirement could be:
    - Baseline – [Drought Severity Based Reduction Target] +/- [Water Audit Results Adjustment] +/- [Viability of the Water Supply Adjustment]

# Drought Response Strategies

- Possible Alternatives:
  - No Numeric targets. Specific mandated measures based on drought severity (as described above)
    - Baseline irrelevant
  - No adjustments based on Water Loss Audits
    - Address that through upcoming conservation rule
  - No adjustments based on Viability of Water Supply
    - Instead, utilize variance requests process in statute to address this issue
  - Regarding Applicability:
    - If industrial/commercial permittees are included (or drinking water systems serving significant industrial/commercial customers), should their reduction levels (if rule includes numeric reduction levels) be different?
    - If Agriculture permittees are included, should they have different requirements from the others? If so, how?
  - Should the rule address, and restrict in some manner, specific water uses that are not listed or covered by OCGA 12-5-7(a.1)(1) or (2)?

# Drought Response Strategies

- Input Requested:
  - Any input related to possible drought response strategies

# Variance Procedures

- Possible Approach
  - If Variance request is for actions more stringent than required, the rule could include a process for EPD to receive and review such requests. A request could include:
    - Description of proposed restrictions, duration, explanation for why needed
    - Water supply and demand analysis including analysis of effect the additional proposed restrictions would have on streamflow or storage
  - Regarding the possibility for requests to EPD to approve actions less stringent than required (actions less stringent than the statutory requirements are not permissible):
    - EPD could have provisions built into the rule such that the drought response strategies would be less stringent for systems that are in good shape
      - The provisions described in the previous bullet could obviate the need for a separate special variance process in the rule (statute would obviously remain)
  - Possible Alternative (For Variance requests to approve actions less stringent than required)
    - EPD could have procedures in the rule similar to the process described above for Variance requests for more stringent actions than required
- Input Requested:
  - Any input related to possible variance procedures

# Wrap Up

- Thank you for your interest, attendance, and participation
- Please provide any comments by June 3, 2014
  - Mail: James A. Capp  
Chief, Watershed Protection Branch, EPD  
2 Martin Luther King Jr. Drive, Suite 1152 East  
Atlanta, GA 30334  
RE: Drought Management Rule – Stakeholder Meeting #1
  - E-mail: [tim.cash@dnr.state.ga.us](mailto:tim.cash@dnr.state.ga.us); Subject: Drought Management Rule – Stakeholder Meeting #1
- To ensure that you are notified of any future EPD Watershed Branch stakeholder meetings and/or public hearings on this subject, please email Tim Cash: [tim.cash@dnr.state.ga.us](mailto:tim.cash@dnr.state.ga.us)

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