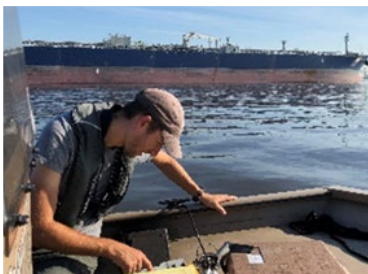


Presented to an advisory committee of the DRBC on June 3, 2026. Contents should not be published or re-posted in whole or in part without the permission of DRBC.

DRBC Drought Management and Contingency Plan Overview

Chad Pindar, P.E. & David Kovach, P.G.

June 3, 2026
*Water Management Advisory
Committee (WMAC)*



Delaware River Basin Commission

Drought Management & Contingency Planning

- Recent extreme dry weather conditions have resulted in heightened interest in drought operations.
- In the DRB, water allocation is done by different agencies.
- Agencies may have different methods, standards, goals, etc.
- Goal is to better understand the basics of current DMCP practices in the DRB.

Meeting DMCP Agenda

1. DRBC
2. DE DNREC
3. NJDEP
4. NYSDEC
5. PADEP



DRBC Outline

1. Current Lead Agencies for water withdrawal projects in the DRB
2. Drought & Depletive Use Reduction During Drought
3. Priorities of Water Use During Drought Emergencies
4. Contingency Plans
5. DRBC Drought Management Contingency Plans
 - a. DRBC Project Application
 - b. Guidance

1. Current Lead Agencies for water withdrawal projects in the DRB

- DRBC threshold for review/approval of water withdrawal projects
 - Basin-wide GW / SW: 100,000 gpd over 30 consecutive days
 - SEPA GWPA GW: 10,000 gpd
 - Administrative Agreements



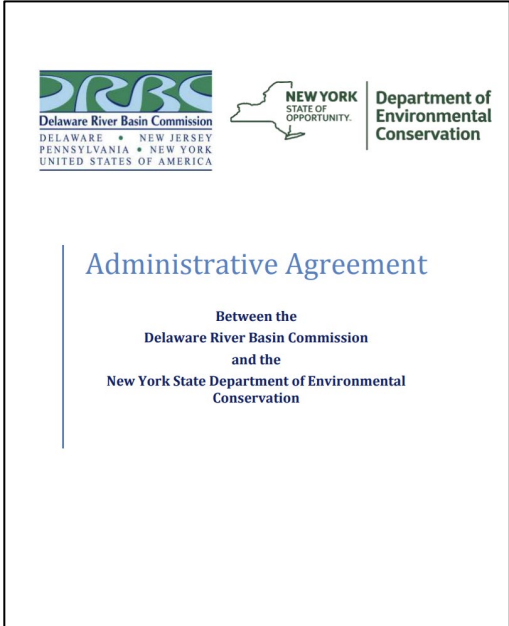
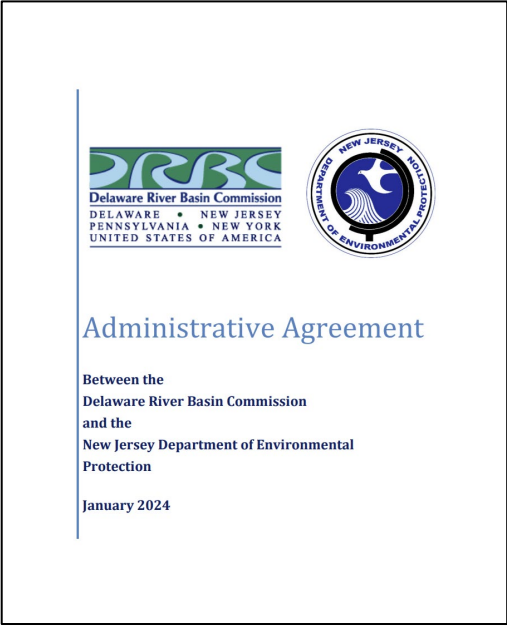
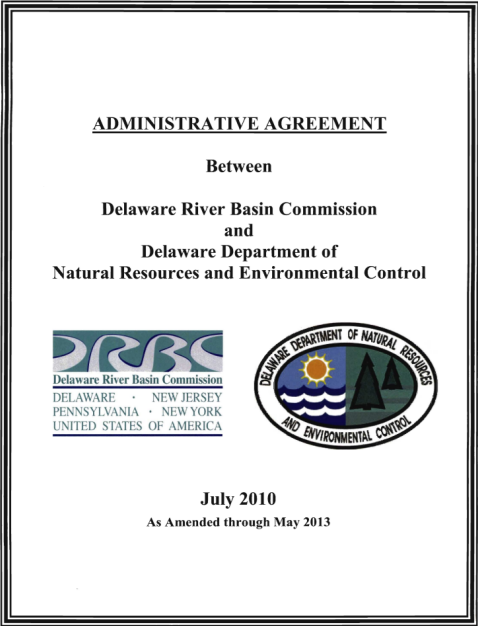
1. Current Lead Agencies for water withdrawal projects in the DRB

State	Lead Agency by Sectors	
	Public Water Supply	Other Sectors
DE	mostly DNREC	mostly DNREC
NJ	mostly NJDEP	mostly NJDEP
NY	DRBC / NYSDEC	DRBC
PA	DRBC / PADEP	DRBC

https://www.nj.gov/drbc/library/documents/AA/NJ_january2024.pdf

https://www.nj.gov/drbc/library/documents/AA/NYSDEC_march2016.pdf

<https://www.nj.gov/drbc/library/documents/AA/DE072810amended050813.pdf>

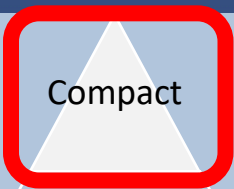


1. Current Lead Agencies for water withdrawal projects in the DRB

State	Total DRB Approvals	Withdrawal Sector	Active Approvals	Total Allocation (MGD)
DE	108	Industrial / Commercial	14	489
		Irrigation	58	118
		Other	4	4
		Public Water Supply	30	165
		Thermoelectric	2	894
NJ	548	Industrial / Commercial	38	276
		Irrigation	355	333
		Other	33	169
		Public Water Supply	115	420
		Thermoelectric	7	3,760
NY	31	Industrial / Commercial	3	2
		Irrigation	4	2
		Other	3	6
		Public Water Supply	21	19
		Thermoelectric	7	3,760
PA	385	Industrial / Commercial	63	236
		Irrigation	66	24
		Other	35	281
		Public Water Supply	206	1,215
		Thermoelectric	15	1,050

1,072

2. Depletive Use Reduction During Drought



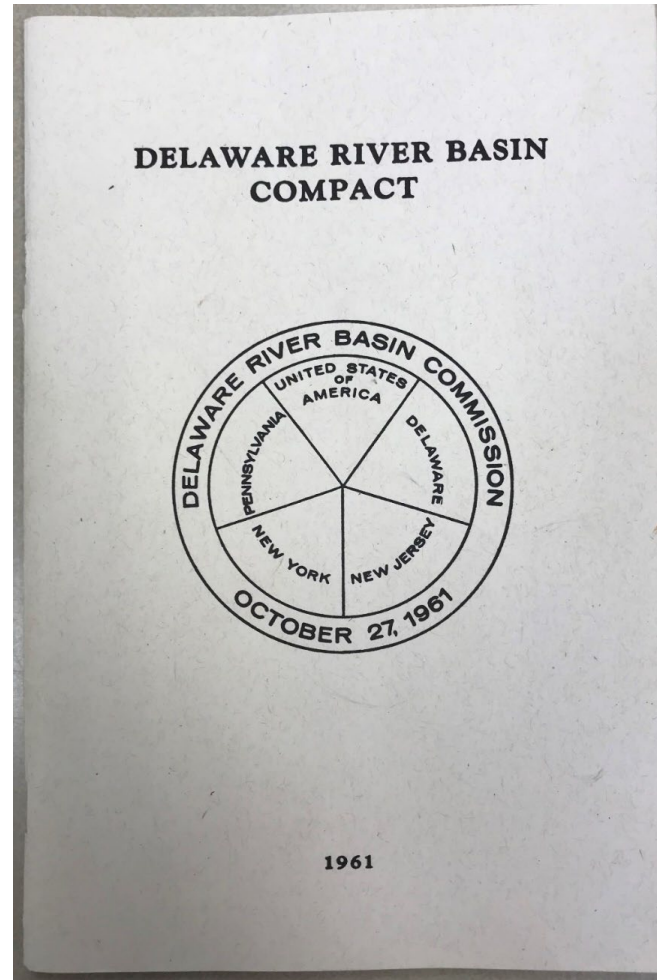
Compact

Water Code

Rules of Practice & Procedure

Project Application Form

Guidance

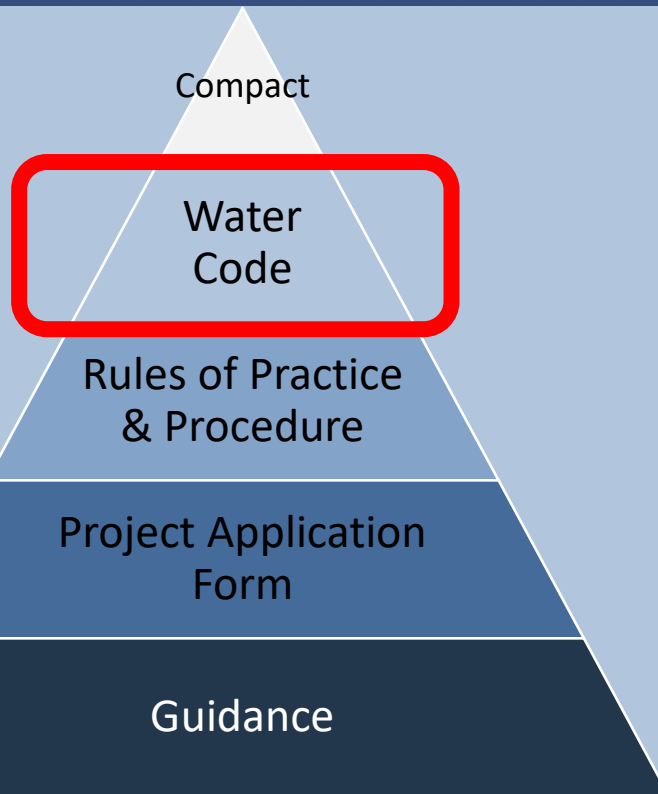


Section 10.4 Emergency.

In the event of a drought or other condition which may cause an actual and immediate shortage of available water supply within the basin, or within any part thereof, the commission may, after public hearing, determine and delineate the area of such shortage and declare a water supply emergency therein. For the duration of such emergency as determined by the commission no person, firm, corporation or other public or private entity shall divert or withdraw water for any purpose, in excess of such quantities as the commission may prescribe by general regulation or authorize by special permit granted hereunder.

<https://www.nj.gov/drbc/library/documents/compact.pdf>

2. Depletive Use Reduction During Drought



DELAWARE RIVER BASIN WATER CODE

WITH AMENDMENTS THROUGH
DECEMBER 7, 2022

18 CFR PART 410



DELAWARE RIVER BASIN COMMISSION
P.O. Box 7360, West Trenton, New Jersey 08628
(609) 883-9500 • www.drbc.gov

Section 2.1.4 *

It shall be the policy of the Commission that **conservation measures** in the Basin designed for implementation **during drought periods** shall be based upon the objective of **reducing overall depletive use of fresh water by 15 percent.**

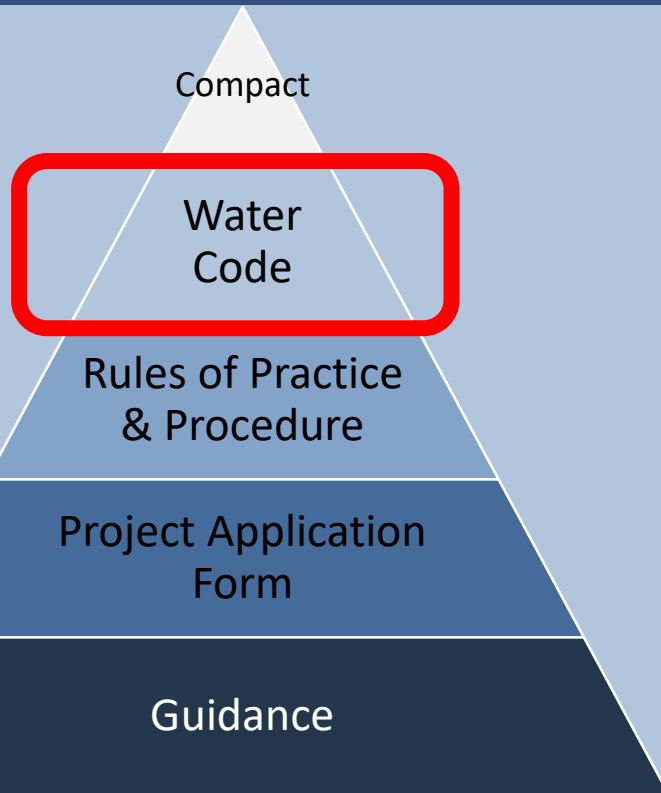
1981 Level B Study – Part II. C. 3. h. (page 36) Water Conservation.

The target savings of 15% is from the “mixed objective” scenario and “would be achieved through measures contained in a drought contingency plan.”

* Resolution 83-14 ; adopted 6/29/1983 – recommendation of Level B Study & Good Faith Agreement. https://www.nj.gov/drbc/library/documents/Level-B-Study_May1981.pdf

<https://www.nj.gov/drbc/library/documents/watercode.pdf>

3. Priorities of Water Use During Drought Emergencies



Section 2.5.2. Priorities of Water Use During Emergencies *

For the purposes of drought management, the Water Code currently provides that the Commission will give first priority to those uses which sustain human life, health and safety, and second priority to water needed to sustain livestock.

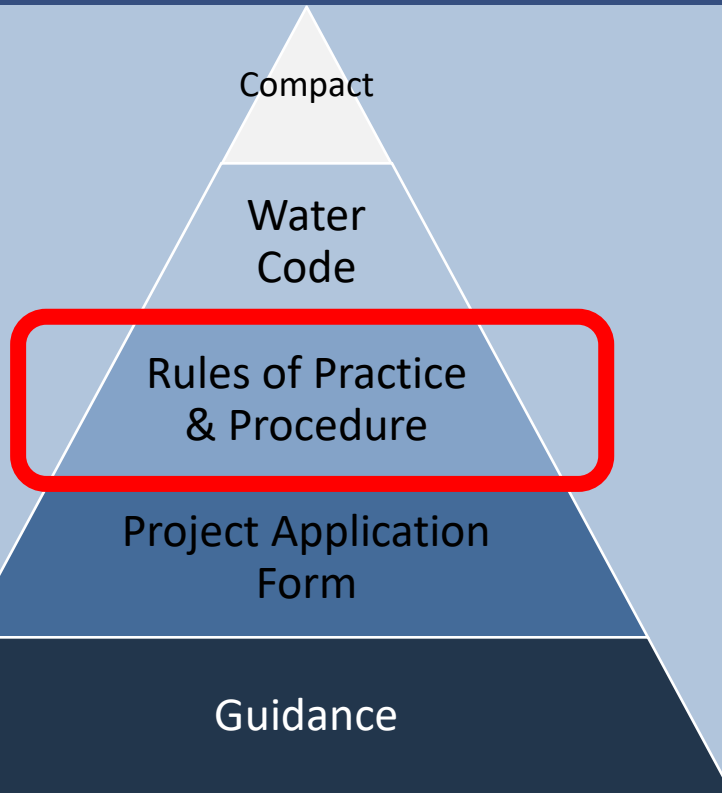
Thereafter, based on the doctrine of equitable apportionment, the remaining water will be allocated among producers of goods and services, food and fibers, and environmental quality in a manner designed to sustain the general welfare of the basin and its employment at the highest practical level.



* Resolution 76-18; adopted 11/10/1976

The Commission will.....develop contingency plans to carry out the purposes of such regulations.

4. Contingency Plans



Administrative Manual RULES OF PRACTICE AND PROCEDURE

18 CFR Part 401

Revised to Include
Amendments Through
July 1, 2025



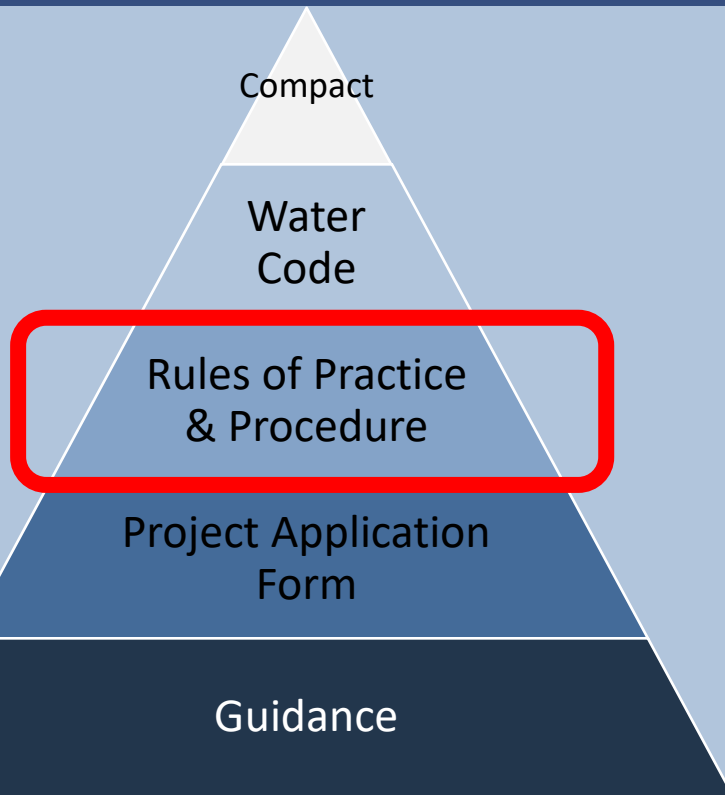
Delaware River Basin Commission
25 Cossey Road
P.O. Box 7360
West Trenton, NJ 08628-0360
(609) 883-9500
www.drbc.gov

Section 401.36 Water Supply projects – conservation requirements.

Maximum feasible efficiency in the use of water is required on the part of water users throughout the Basin. Effective September 1, 1981 applications under Section 3.8 of the Compact for new water withdrawals subject to review by the Commission shall include and describe water-conserving practices and technology designed to minimize the use of water by municipal, industrial and agricultural users, as provided in this section.

https://www.nj.gov/drbc/library/documents/admin_manualCFR.pdf

4. Contingency Plans



Section 401.36 Water Supply projects – conservation requirements.

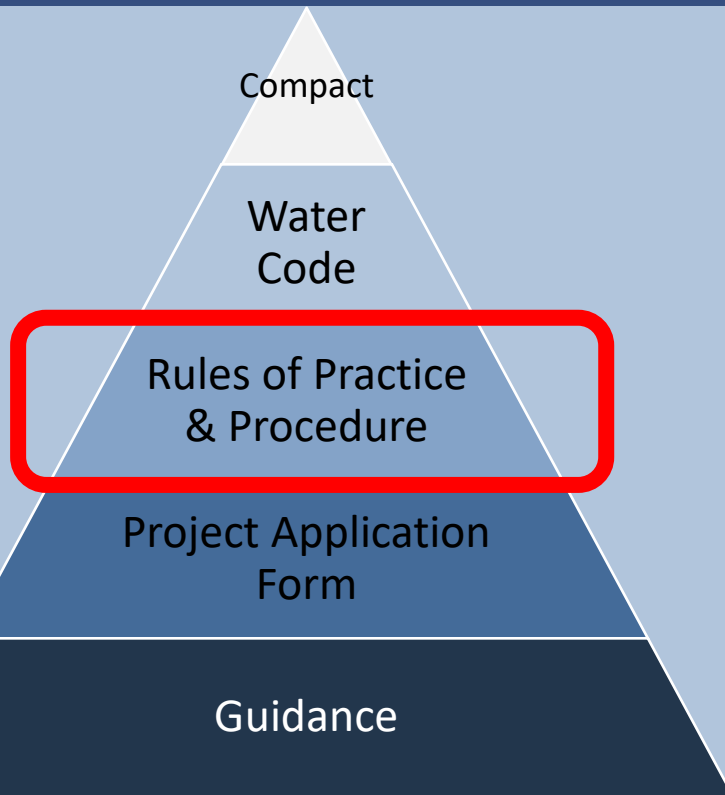
- (a) New public water supply projects > 1 mgd require a program be developed
- (b) Program subject to applicable host state public utility regulations

(c) New industrial & commercial projects > 1 mgd

(d) New agricultural irrigation water projects > 1mgd

(e) Reports, programs and contingency plans required under this section shall be submitted by the applicant as part of the permit application to the state agency having jurisdiction over the project, or directly to the Commission in those cases where the project is not subject to the jurisdiction of a state agency. State agencies having jurisdiction over a project that is subject to the provisions of this section shall determine the adequacy and completeness of the applicant's compliance with these requirements and shall advise the Commission of their findings and conclusions.

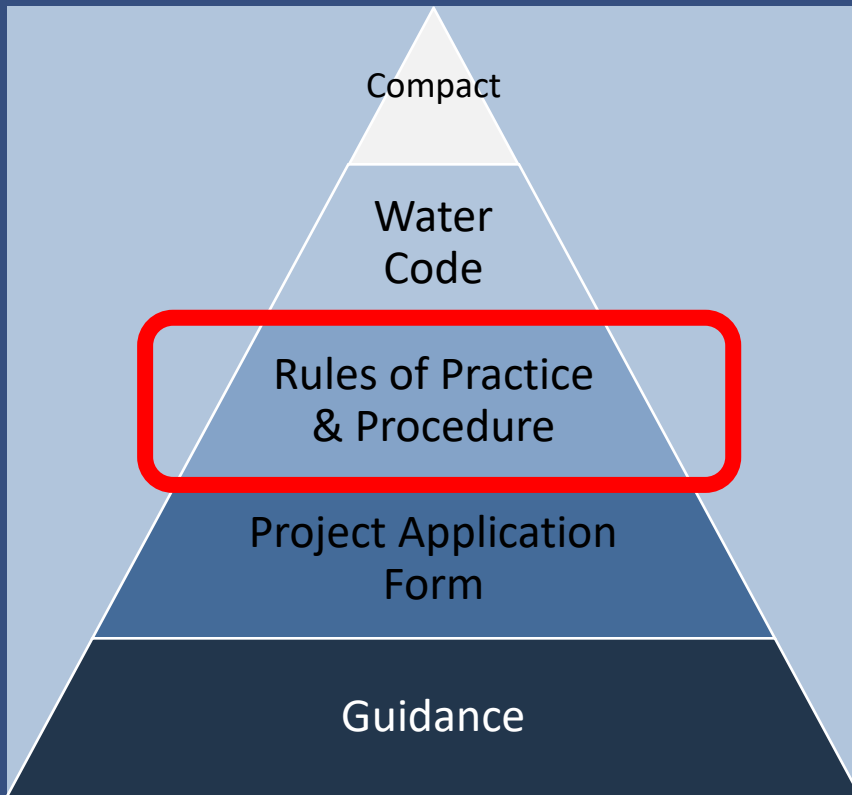
4. Contingency Plans



Section 401.36 Water Supply projects – conservation requirements.

- (a) New public water supply projects > 1 mgd require a program be developed
- 1) Systematic leak detection & control program
 - 2) Water conserving devices
 - 3) A contingency plan including **use priorities** and **emergency conservation measures** to be instituted in the event of a drought or other water shortage condition. Contingency plans of public authorities or private water works corporations shall be prepared in cooperation with, and made available to, all municipalities in the area affected by the contingency plan, and shall be coordinated with any applicable statewide water shortage contingency plans.

4. Contingency Plans

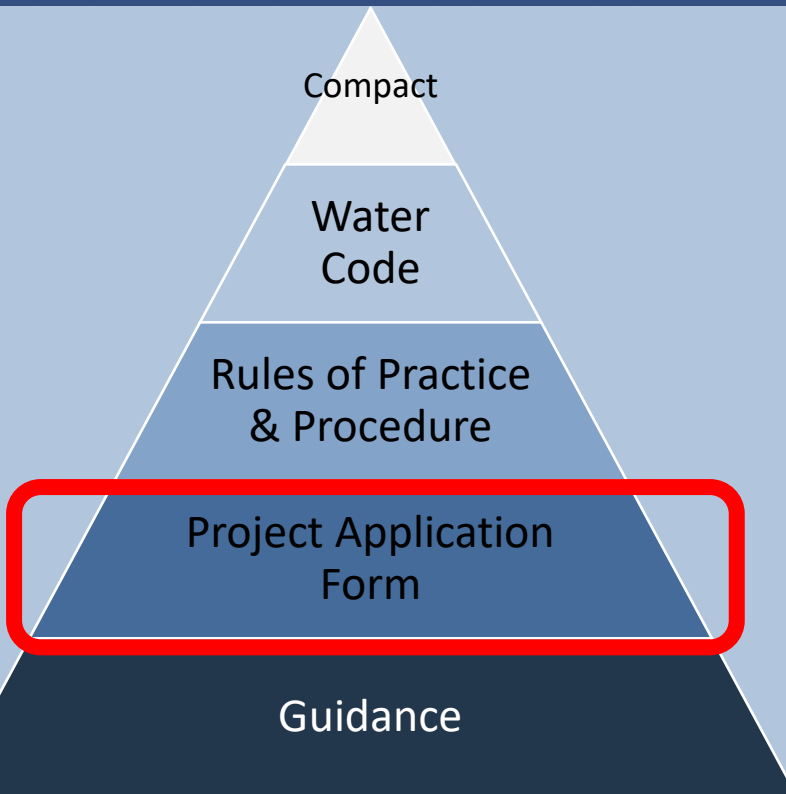


Section 401.36 Water Supply projects – conservation requirements.

(c) Applications for approval of new industrial or commercial water withdrawals from surface or ground water sources in excess of an average of one million gallons per day shall contain (1) a report of the water-conserving procedures and technology considered by the applicant, and the extent to which they will be applied in the development of the project; and (2) a contingency plan including emergency conservation measures to be instituted in the event of a drought or other water shortage. The report and contingency plan shall estimate the impact of the water conservation measures upon consumptive and non-consumptive water use by the applicant.

(d) Applications for approval of new agricultural irrigation water withdrawals from surface or ground water sources in excess of one million gallons per day shall include a statement of the operating procedure or equipment to be used by the applicant to achieve the most efficient method of application of water and to avoid waste.

5. DRBC Drought Management and Contingency Plans



INSTRUCTIONS AND APPLICATION FOR A GROUNDWATER AND/OR SURFACE WATER WITHDRAWAL IN THE DELAWARE RIVER BASIN

Who must apply?

An application must be submitted by anyone proposing:

- A withdrawal from a single well or a group of wells operated as a system exceeding a daily average gross withdrawal of 100,000 gallons per day (gpd) during any 30 consecutive day period, for any purpose.
- A withdrawal from impoundments or running streams exceeding a daily average gross withdrawal of 100,000 gpd during any 30 consecutive day period, for any purpose.
- A withdrawal from a single well or group of wells operated as a system exceeding a daily average gross withdrawal of 10,000 gpd during a 30-day period, for any purpose, within the Southeastern Pennsylvania Ground Water Protected Area. The Delaware River Basin Commission (DRBC or Commission) *Ground Water Protected Area Regulations: Southeastern Pennsylvania* is available on the DRBC website at http://www.nj.gov/drbc/library/documents/gwpa_regs.pdf
- An increased ground and/or surface water withdrawal, regardless of the quantity proposed for a project previously approved by the Commission.
- A renewal of an existing withdrawal previously approved by the Commission.
- A diversion or transfer (exportation or Importation) of water into or out of the Delaware River Basin (DRB) with a design capacity in excess of a daily average rate of 100,000 gallons.
- Existing users without a DRBC docket (or GWPA permit) or allocation (i.e., entitlement holders or docket/permit holders without an allocation) that exceed the thresholds described above.
- Groundwater and surface water withdrawals in the State of New Jersey that require review as specified in the March 2015 *Administrative Agreement* (AA) between the DRBC and New Jersey Department of Environmental Protection for inclusion in the DRBC Comprehensive Plan.
- Groundwater and surface water withdrawals in the State of Delaware that require review as specified in the July 2010 *Administrative Agreement* (AA) between the DRBC and Delaware Department of Natural Resources and Environmental Control.

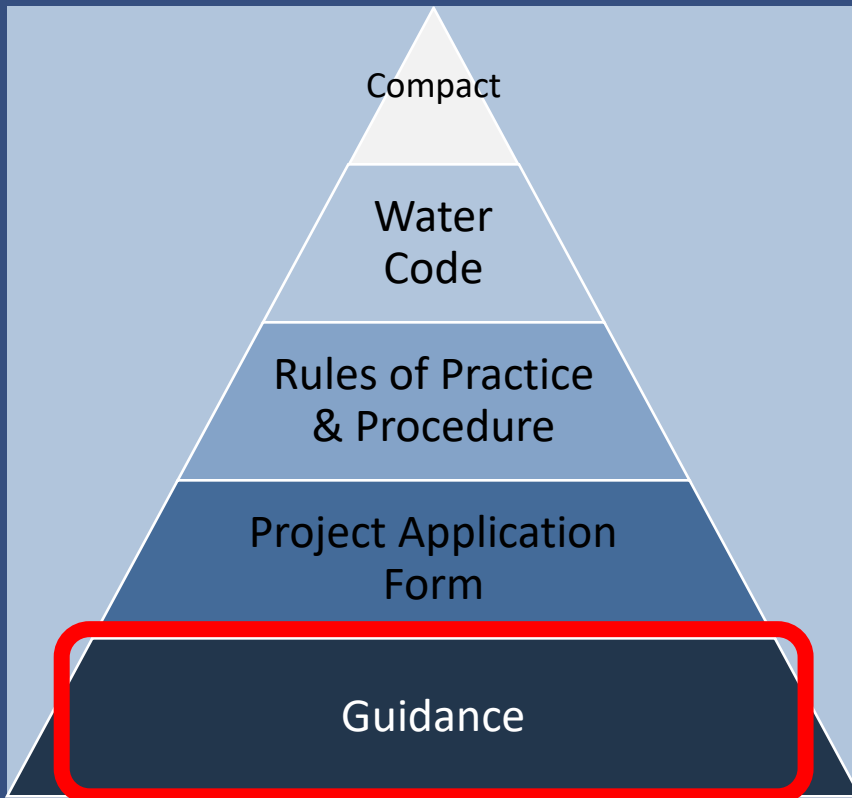
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Rev. 3/2022

16. Drought Management and Contingency Plan: (All projects with a total system water withdrawal in excess of 1.0 mgd or any withdrawal project in the Southeastern Pennsylvania GWPA.) A drought management and contingency plan shall be prepared by each person, firm, corporation or other entity withdrawing groundwater or surface water for purposes of municipal or public, industrial, or commercial water supply. The plan shall provide the necessary actions the applicant will execute to **reduce demand** and assure water supplies to priority uses **during a declared drought emergency**. The plan will include emergency water conservation measures and identify potential water use restrictions the applicant will implement to achieve a reduction in a small percentage of their normal water use. **Such plans shall be filed with this application.**



5. DRBC Drought Management and Contingency Plans



DRBC published guidance in June 2011 – available online

Drought Management and Contingency Plan must contain 8 elements:

1. source of water supply
2. average daily and monthly peak water withdrawal
3. average daily and monthly peak consumptive use
4. description of conservation measures in place or planned
5. point of discharge (where water is returned to the DRB)
6. types of products produced
7. normal employment levels; estimated reduction in employment if water usage is curtailed : 15, 25, 35, 50 and 100%
8. estimated economic impact if water usage is curtailed: 15, 25, 35, 50, 100%

Once a DMCP has been approved, the docket holder shall implement the DMCP upon direction by the Executive Director or the Commission declaration of a Drought.

https://www.nj.gov/drbc/library/documents/projectreview/guidance_drought-plans.pdf

5. DRBC Drought Management and Contingency Plans

What has DRBC done during actual drought emergencies?

- 1981 (resolution 1981-8)
- 1985 (resolution 1985-17)
- 1989 (resolution 1989-11)
- 1999 (resolution 1999-05)

- States will take curtailment actions as necessary for PWSS
- Major users in DRB that are not PWSS
 - Temporary curtailment by large users can be helpful
 - > 1 mgd users (not below C&D canal, S NJ)
 - Prepare contingency plans for curtailment
 - Submit plans to DRBC
 - Implement upon direction

- 1999 (resolution 1999-18)
- 2001 (resolution 2001-32)

- Upon the request of a signatory state, the Commission shall require self-supplied users of ground and surface waters in that state whose use for any purpose exceeds an average of 1 mgd during any 30-day period to prepare contingency plans for water curtailment or reduction in the event that it is necessary and submit those plans to the Commission.

- 2016 (resolution 2016-8)
- 2024 (resolution 2024-7)

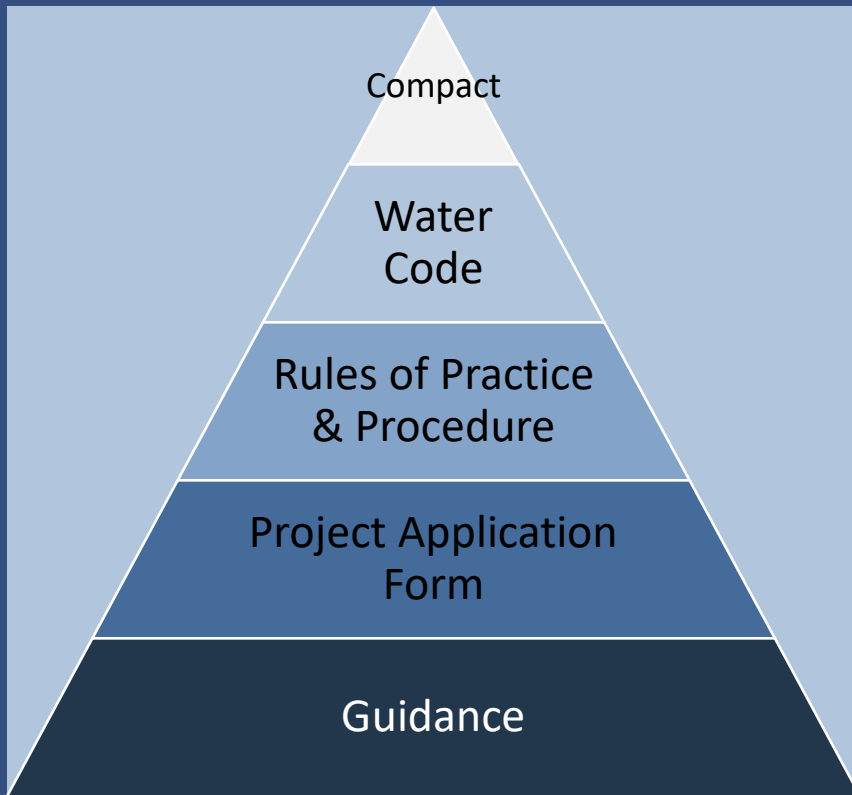
- Silent on DMCPs. The signatory states shall be responsible for the declaration of county or statewide drought stages in their respective jurisdictions as they deem necessary, and shall be responsible for the implementation and enforcement of associated water use restrictions in these areas.

<https://www.nj.gov/drbc/programs/flow/drbc-drought.html#5>

DRBC's 1981 Annual Report: Probably the greatest indirect blessing of the management program was that it obviated the need for DRBC to curtail industrial operations in the basin, which was authorized by the members on a contingency basis. The measure empowered the Commission to order self-supplied industries to reduce their consumptive water withdrawals if things continued to get worse- but they did not. A preparatory canvas of industries indicated that substantial wage and business losses could have been the economic effect of only a 10-to-25 percent consumptive water use cutback. This also would have meant the loss of significant state and federal tax revenues.

Summary of DRBC

Findings



1. During drought conditions, there is a goal to reduce C.U. by 15%
2. Contingency Plans have been a requirement in the DRB for a subset of new, large withdrawals since September 1981
 - Agency with jurisdiction depends on state / sector / AAs
3. Public Water Supply Systems contingency plans are expected to be handled by state agencies
4. DRBC DMCPs are focused on new commercial/industrials withdrawals >1 mgd
 - DRBC guidance emphasizes quantifying employment and economic impacts with curtailments of 15, 25, 35, 50 and 100%
 - Power withdrawals avoid curtailment by replacing C.U. (separate DRBC policy)
5. DRBC reviews DMCPs at time of application / renewal (~ 10 year intervals)
6. The DRBC has not ordered curtailment for non-PWSS large users in any of 8 water supply emergencies declared after the 1960's.