Tab 6

Town of Oriental

Water Shortage Response Plan Ordinance 2009

Section 1. **Purpose.** The purpose of this Plan is to provide for the declaration of official phases of water supply shortages and the implementation of voluntary and mandatory water conservation measures throughout the Utility's service are in the event a shortage is declared.

Section 2. **Authority to Implement.** When conditions dictate, the Town of Oriental's Public Works Supervisor and the Town Manager under the Direction of the Town's Mayor, ~~may~~ shall implement a Water Shortage Response Plan (WSRP). Conditions, which may require the WSRP to be enacted, are outline in Section 4.

Section 3. **Notification.** When a Water Shortage Response Plan is enacted, the Town of Oriental's Public Works Supervisor shall notify via telephone or cell phone the Town Manager, the Town Mayor, and the Operator in Charge (ORC). In turn, it shall be the duty of the Town Manager and the Mayor of the Town of Oriental to notify all local media outlets (television stations, newspaper(s), radio stations), and to place a notice on the Town's website, and shall initiate an electronic mail notification (e-mail) to be sent to all persons listed on the Town's emergency contact list. Should the emergency last for a period in excess of 72 hours, a direct mail message shall be sent to each customer of the Town's water plant notifying such persons in writing of the existence of the emergency, the Town's chosen solution, and convey other pertinent information regarding the Water Shortage Response Plan implemented. All required response measures shall be included in all written communication with water customers and in all media messages conveyed to the general public.

Section 4. **Factors Requiring Implementation of the Water Shortage Response Plan.** Several parameters or conditions may require the Town of Oriental to begin the WSRP. These include but may not be limited to significant reductions in well water levels, a significant increase in pump run times for the predetermined total flow at the well(s), contaminants in the water system, acts of terrorism, vandalism, main breaks and natural disasters.

If the factors listed above reduce well water levels or pump run times, or by any event or combination of events, prevent the water system from delivering water, WSRP phases will be enacted in the following order:

Phase I will be enacted if a 20% reduction in normal well water levels is noted or if pump run times increase 20% in order to maintain previous rates or any other event which cases a 20% reduction in the water system's capacity.

Phase II will be enacted if a 40% reduction in normal well water levels is noted or if pump run times increase 40% in order to maintain previous rates or any other even which causes a 40% reduction in the system's capacity.

Phase III will be enacted if a 60% reduction in normal well waters levels is noted or if pump run times increase 60% in order to maintain previous rates or any other event which causes a 60% reduction in the system's capacity.

Section 5. **Water Use Classification.** In order to facilitate a fair and equitable WSRP, every water use will be grouped into one of three classifications.

Class I – Essential Water Uses
These uses include but may not be limited to water use required to/for:

- Sustain human life and the lives of domestic pets
- Maintain minimum standards of hygiene and sanitation
- Health care uses necessary for patient care and rehabilitation
- Firefighting, including training and drills as approved by the Town's Mayor

Class II – Socially or Economically Important Water Uses
These include but may not be limited to water use required to/for:

- Preserve commercial vegetable gardens, fruit orchards, nursery stock, aquaculture, and livestock maintenance
- Outdoor commercial watering, public or private
- Establishing vegetation, after construction/earth moving activities
- Filling and operation of municipal or private swimming pools provided that these swimming pools serve 25 or more residents
- Operation of commercial car washes, restaurants, Laundromats, clubs, schools, churches and other similar establishments

Class III – Non-Essential Water Uses
These uses include but, may not be limited to:

- Operation of water fountains, ornamental pools and recreational swimming pools
- Non-commercial washing or motor vehicles, sidewalks, house, etc
- Non-commercial watering of gardens, lawns, parks, playing fields and other recreational areas

Section 6. **Phased WSRP and Water Use Reduction Goals.** When the WSRP is implemented, the below phased approach will be followed:

Phase I – Voluntary Conservation

This phase will be enacted when it is determined that one or more of the parameters outlined in Section 3 is met. If this occurs, the consumers will be notified promptly by any or all of the following: mailers, door hangers, public postings at the Town Hall, Post Offices, Town Website etc. The public will be asked to begin voluntary conservation measures and Class III Non-Essential uses will be halted. Specific conservation measures and tips can be seen on Attachment I.

Continued water consumption by Class III, non-essential users will result in a written notice of violation for the first offence and a $25 fine for each subsequent offense.

If the determining parameters(s) return to seasonal norms, the measures will be lifted. However, failure of the determining parameter(s) to return to the state of seasonal normalcy may require the initiation of Phase II.

Phase II – Mandatory

This phase will begin when the Town Public Works Supervisor issues a water shortage advisory. The consumers will be notified by one of the methods noted in Phase I. All users will be required to adhere to the voluntary conservation measurers as noted in Attachment 1. Class III uses will be banned. Class II uses will be allowed although outdoor vegetative watering will be limited according to the resident's street address. Even numbered addresses will be allowed to water on even days of the month. Odd numbered addresses will be allowed to water on odd days of the month.

During Phase II, industrial facilities will be required to develop and demonstrate to the Town Manager a water shortage response program. This program should show, at least, a 25% reduction in water usage.

Failure to adhere to the Phase II (Mandatory) required conditions will result in written notice of violation for the first offense and/or a $50 fine. Thereafter, each violation increases by a factor of $50. Any violation past a fourth offense shall result in a disruption of water service to the offending party until Phase II has been rescinded.

Phase III – Emergency

This phase will commence with the issuance of a water shortage emergency declaration from the Town's Public Works Supervisor. Users will be notified by any or all of the methods noted in Phase I. All users will be required to use voluntary conservation measures outlined in "Attachment 1". Class III uses will be banned and Class II uses will be allowed with the exception of vegetative watering Industrial users will be required to implement their water reduction program immediately.

Failure to comply with the mandates during Phase III will require the offending party to pay $100 fine for the first offense, $350 fine for the second offense and disruption of service for the third offense.

In addition, residential users will be allotted 1000 gallons per month per person per connection. If the user uses 1001 – 1250 gallons per month per person per connection, a surcharge of 25% will be added to the monthly water bill. If the user uses 1251 – 1500 gallons per month per person per connection, a surcharge of 75% will be added to the monthly water bill. If the user uses 1501 or more gallons per month per person per connection, a surcharge of 150% will be added to the monthly water bill.

Commercial, industrial and institutional facilities will be required to reduce their monthly water consumption by 25% of the previous 12 month water consumption average to maintain the current water rate for that month. The average water use can be evaluated on an individual basis for facilities with seasonal demand fluctuations. A 10 – 24% water use reduction from the previous 12 month water use average will require the Town to impose a 25% surcharge on the monthly water bill. A 0 – 9% water use reduction from the previous 12 month water use average will require the Town to impose a 50% surcharge on the monthly water bill. An increase of 1 – 25% above the previous 12 month water use average will result in a surcharge of 100% added to the next monthly bill. Any amount used above 25% of the previous 12 month average water use will require the Town to add a surcharge of 150% to the monthly bill.

Section 7. **Enforcement.** Enforcement of mandatory conservation will be the responsibility of the Public Works Supervisor under the direction of the Town Manger and the Mayor. Associated fines will be the responsibility of the Town Manger and the Mayor.

Section 8. **Water Shortage Response Plan Cancellation.** As the determining parameter(s) decrease in severity and return to acceptable levels, the Town will lift the WSRP. The cancellation process will be in the reverse order of the WSRP implementation.

Section 9. **Review and Comments.** The residents will be given an opportunity to review the WSRP at the Town of Oriental office. Comments can be given in writing to the Town Manager and/or Town Mayor.

Section 10. **Variance.**

a. Process. Variance request will be given to the Town Manager in writing. This will be presented to the Town Board of Commissioners for considerations.

b. Granting. The Town Board of Commissioners will grant variance based on usage, length of time, alternative source, social and economic importance, and impact on water demand.

Section 11. **Effectiveness of WSRP.** The WSRP effectiveness will be based on the frequency that it is activated, time period in which the activations occur, number of violations/citations handed out, and amount of time taken to raise the % of water capacity.

Section 12. **Revisions.** The WSRP will be reviewed on a yearly basis and/or after each occurrence of water reductions.

Section 13. **Effective Date.** The WSRP shall take effect immediately upon approval by the Town Board of Commissioners.

ADOPTED THIS 3rd DAY OF April, 2018

_____
Sally Belangia, Mayor

ATTEST:_____
Diane H. Miller, Town Manager

Conservation Measures
Water Shortage
Response Ordinance

Direct Users to adopt the following conservation measures:

INDOOR RESIDENTIAL USE:
Conservation for Voluntary and Mandatory Conservation Phases

- Use dishwashers only when they are full. Washing dishes by hand (don't let the tap run!) saves about 25 gallons.
- Adjust water level on clothes washing w\machines, if possible. Use full loads only, if not adjustable.
- Turn off faucets while brushing teeth, etc. Saves about 5 gallons per day.
- Reduce water used per flush by installing toilet tank displacement inserts, a plastic jug may often be used as an alternative. DO NOT USE BRICKS – they disintegrate when soaked and the resulting grit hinders closing of the flap valve.
- Do not use the toilet as a trash can.
- Use sink and tub stoppers to avoid wasting water.
- Keep a bottle of chilled water in the refrigerator for drinking.
- Find and fix leaks in faucets and water-using appliances. Faucets can usually be fixed cheaply and quickly by replacing washers.
- Adapt plumbing with flow-restricting or other water saving devices. These are usually inexpensive and easy to install.
- Learn to read your water meter so you can judge how much water you use and what difference conservation makes.
- Take shorter showers and shallow baths. Saves about 25 gallons.
- Reduce the number of toilet flushes per day. Each flush uses about 5 gallons (2-3 if you have water saving toilets).
- Don't use a garbage disposal.
- Use non-phosphate detergent and save laundry water for lawns and plants.

Conservation for Emergency Conservation or Rationing Phase (In addition to measures listed above).

- Turn off shower while soaping up.
- Use disposable eating utensils.

OUTDOOR RESIDENTIAL USE
Conservation for Normal Conditions and Voluntary Conservation Phase

Lawns

- Water before 10:00 am to prevent evaporations which occurs during the hottest part of the day. Morning is better than evening, when the dampness encourages growth of fungus.
- Water only when lawn shows signs of wilt. Grass that springs back when stepped on does not need water.
- Water thoroughly: long enough to soak roots, a light sprinkling evaporates quickly and encourages shallow root systems. Water slowly to avoid runoff.
- Don't let the sprinkler run any longer than necessary. In an hour, 600 gallons can be wasted.

- Allow maximum of one inch of water per week on your lawn. To measure, place cake tins outside to collect rain and water from sprinklers.
- Use pistol-grip nozzles on hoses to avoid waste when watering flowers and shrubs.
- Aerate lawns by punching holes 6 inches apart. This allows water to reach roots rather than run off surfaces.
- Position sprinklers to water the lawn, not the pavement.
- Avoid watering on windy days when the wind not only blows water off target, but also causes excess evaporation.
- Keep sprinkler heads clean to prevent uneven watering.
- Adjust hose to simulate a gentle rain. Sprinklers that produce a fine mist waste water through evaporation.
- Know how to turn off an automatic sprinkler system in case of rain.
- Use an alarm clock or stove timer to remind you to shut off sprinklers that don't have timers.

Vegetables and Flower Gardens

- Water deeply, slowly and weekly. Most vegetables require moisture to a depth of 6 to 8 inches.
- Keep soil loose so water can penetrate easily.
- Keep weeds out to reduce competition for water.
- Put the water where you want it and avoid evaporation by using soil-soakers or slow-running hoses, not sprinklers.

Trees and Shrubs

- Water deeply using a soil-soaker or drip-irrigation.
- Water only when needed. Check the depth of soil dryness by digging with a trowel.
- Mulch to reduce evaporation (2" to 3" layer of wood chips, pine needles, grass clippings, or straw keeps the soil cool in the summer).
- Dig troughs around plants to catch and retain water.
- Water trees growing in full sun more often than those in shade.
- Do not use sprinklers. Apply water directly at base.
- Do not fertilize during the summer. Fertilizing increases a plant's need for water.
- Postpone planting until fall or spring when there is generally less need for water.
- Install trickle-drip irrigation systems close to the roots of your plants. By dripping water slowly, the system doesn't spray water in to the air. Use soil probes for large trees.
- Water when cloudy, at night, or even when a light rain is falling.

OUTDOOR RESIDENTIAL USE

Conservation for Voluntary Conservation Phase (in addition to measures listed above)

- Don not allow children to play with hose or sprinklers.
- Limit car washing.
- Be ready to catch rainfall that occurs. Place containers under drain sprouts.
- Use leftover household water if available.
- Consider delaying the seeding or sodding of new lawns.
- Determine the amount of water being used outdoors by comparing water bills for summer and winter.

Conservation for Mandatory Conservation Phase (in addition to measures listed above)

- Vegetable gardens and food trees should be given minimal amounts of water on an individual basis only.
- Do not water lawns and inedible plants.
- Do not use sprinklers.

Most outdoor watering is prohibited under Emergency Conservation conditions.

HOSPITAL AND HEALTH CARE FACILITY USE

- Reduce laundry usage or services by changing the linens, etc only when necessary to preserve the health of patients or residents.
- Use disposable food service items.
- Eliminate, postpone, or reduce, as they may be appropriate, elective surgical procedures during the period of emergency.

INDUSTRIAL USE

- Identify and repair all leaky fixtures and water-using equipment. Give special attention to equipment connected directly to water lines, such as processing machines, steam-using machines, washing machines, water-cooled air conditioners, and furnaces.
- Assure that valves and solenoids that control water flows are shut off completely when the water-using cycle is not engaged.
- Adjust water-using equipment to use the minimum amount of water required to achieve its stated purpose.
- Shorten rinse cycles for laundry machines as much as possible; implement lower water levels wherever possible.
- For processing, cooling, and other uses, either re-use water or use water from sources that would not adversely affect public water supplies.
- Advise employees, students, patients, customers, and other users not to flush toilets after every use. Install toilet tank displacement inserts; place flow restrictors in shower heads and faucets; close down automatic flushes overnight.
- Install automatic flushing valves to use as little water as possible or to cycle at longer intervals.
- Place water-saving posters and literature where employees, students, patients, customers', etc will have access to them.
- Check meters on a frequent basis to determine consumptive patterns.
- Review usage patterns to see where other savings can be made.