

DRAFT POLICY REGARDING WATER REUSE

Policy Objective

The primary objective of all policies is to support the Groundwater Reduction Plan (SJRA GRP) Program and to benefit all SJRA GRP Participants. The objective of this water reuse policy is to encourage the ongoing use of reclaimed wastewater by the SJRA GRP Participants for the purpose of reducing irrigation and amenity lake maintenance and other applicable demands which have historically been provided by the potable water system or by groundwater wells. Water reuse will not impact the infrastructure required to meet the 2016 conversion. However, water reuse may have a significant future impact by delaying the need for future infrastructure and ultimately delaying the need for additional water supply sources.

Introduction

Reuse may be defined as the beneficial use of treated wastewater effluent for non-potable purposes. Reuse of treated municipal wastewater effluent is becoming an increasingly important source of water. Reuse will play an important role in meeting future water supply requirements for the SJRA GRP Program. Some benefits of reuse of treated wastewater effluent include:

1. Reducing the total potable water demand.
2. Reducing demand on water resources.
3. Trace nutrients in treated wastewater effluent (primarily phosphorus and nitrogen) can be beneficial for some plant growth.
4. Use of treated effluent for irrigation makes efficient use of a valuable commodity instead of discharging it to a receiving stream.

The two types of reuse are direct reuse and indirect reuse. Direct reuse occurs when treated wastewater is delivered from a wastewater treatment plant directly to a water user prior to discharge into a stream segment. Several potential applications where direct reuse could be used in lieu of other water supplies include:

- Golf course irrigation
- Green space irrigation (esplanades, green belts, and parks)
- Water to maintain levels in amenity lakes
- Sports / athletic field irrigation

Indirect reuse occurs when treated wastewater effluent is discharged to a stream or reservoir and is diverted downstream for reuse. Indirect reuse can provide water supplies for municipal use as

well as irrigation and industrial supplies. However, once discharged into a stream segment or reservoir, it becomes the property of the State of Texas. Additional water rights permits are required for indirect reuse.

The Groundwater Reduction Plan, March 2011 (Joint SJRA GRP) identified potential sources of reclaimed wastewater and identified potential users with the recommendation for additional analysis before specific projects are incorporated in future groundwater reduction plans. The greatest obstacle to implementing a reuse project is the cost of the project relative to the cost of existing water supplies. As the cost of compliance with existing regulations increases, the incentives for reuse increase. Any water reuse project developed by the SJRA for the SJRA GRP Program or any project developed by a SJRA GRP Participant will be evaluated on a case by case basis. This evaluation will consider at a minimum the cost effectiveness, the benefits to the SJRA GRP Program and the SJRA GRP Participants, and the long term feasibility and sustainability. The project proposer shall have an evaluation of the request prepared by a licensed Professional Engineer registered in the State of Texas and submitted to the SJRA for consideration.

Policy Elements

1. Evaluate all reuse projects on a case by case basis to determine benefits, feasibility, cost effectiveness and sustainability as discussed above. This will include the matter of SJRA GRP Participant importing/exporting reclaimed water from/to a non-SJRA GRP participant.
2. Implement an incentive program to owners of groundwater wells for which production of those wells is reduced by reuse of wastewater effluent. The incentive may or may not include funding of the project, reduction in pumpage fee, reuse credits, or some other form as may be developed and adopted.
3. Prohibit the resale or redistribution of non-potable water supplied by the SJRA (or a SJRA GRP participant) to other than the intended user without the written consent of the SJRA.
4. Ensure that such reuse:
 - a. does not negatively impact the SJRA GRP or any Participant as a result;
 - b. does not adversely impact the SJRA's storage, diversion, or other water rights; and

- c. complies with applicable laws, rules and regulations of all governmental bodies with jurisdiction, and is subject and subordinate to any future changes in such laws, rules and regulations.
5. Refrain from endorsing or supporting water reuse projects, whether direct or indirect, that take advantage of Lake Conroe's storage and create a negative impact on the firmness of the SJRA's water rights.

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The applicable portions of the SJRA GRP Contract Section 4.12 are reproduced below and included for reference only.

Section 4.12: Passing of Title to Water; Re-use. (a) Except as otherwise provided herein, if water is supplied to Participant under Section 4.04 or 4.05 hereof, then title to and possession and control of such Water shall remain with the Authority until it passes through the Point of Delivery, whereupon title to and possession and control of such Water shall pass from the Authority to Participant at the Point of Delivery. After title to such Water has passed to Participant at the Point of Delivery, Participant shall be responsible for storage, security, treatment, retreatment, disinfection, pressurization, distribution, and all other actions necessary to make use of such Water for Participant's purposes.

(b) Notwithstanding subsection (a) above, but subject to any limitations contained in any water rights permit or certificate, imposed by applicable laws, rules or regulations, or applicable under the Houston Contract or any future agreement between the Authority and a third party for the acquisition of water or water rights for the supply of water for the GRP or to be delivered through the Project, the Authority hereby consents to the direct re-use of Water by Participant; provided, however, that (i) unless specifically approved in writing by the Authority, any reduction in water demand of Participant resulting from such re-use of Water shall not serve to reduce the Contract Quantity, and (ii) the provisions of Section 3.04 hereof shall be applicable to such re-used Water. The Authority agrees that, other than as may be included in any future agreement between the Authority and a third party for the acquisition of water or water rights for the supply of water for the GRP or to be delivered through the Project, it will not impose limitations on the re-use of Water (or any other type of water) by Participant which are more restrictive than such limitations as may be applicable under the Houston Contract.

(c) Notwithstanding subsection (a) above, Water shall be subject to indirect re-use by Participant but only with the prior written consent of the Authority, which consent shall be given subject to the limitations and conditions in subsection (b) above and Section 3.04 hereof, and upon such terms and conditions as the Authority reasonably deems appropriate to ensure that such re-use:

- (1) does not negatively impact the GRP or any particular Participant as a result;
- (2) does not adversely impact the Authority's storage, diversion, or other water rights;
and
- (3) complies with applicable laws, rules and regulations of all governmental bodies with jurisdiction, and is subject and subordinate to any future changes in such laws, rules or regulations.

The Authority reserves the right to enter into additional agreements with a Participant whereby the Authority agrees to contribute Project funds to defray such Participant's costs of a re-use project, but only where the Authority determines that such use of Project funds would be cost effective and beneficial to the Participants as an Alternative Strategy.

(d) To the extent that the Authority or Participant utilizes, sells, or otherwise makes or has contracted for the beneficial re-use of its treated wastewater effluent as of the effective date of the Houston Contract, the continued beneficial re-use of such effluent shall be permitted for the purposes, to the extent, and on the terms existing as of the effective date of the Houston Contract, notwithstanding that a portion of such effluent may thereafter be derived from Water. After the Effective Date, any such re-use of effluent derived from Water shall require the consent of the Authority, if required under subsection (c) above, and Participant shall be responsible for (i) making appropriate provisions in any contracts for the sale of such effluent to the effect that

supply may be limited if the Participant connects to the Project, and (ii) securing the Authority's consent, if Authority consent is required under subsection (c) above, before making investments in re-use projects to address the potential that Participant may connect to the Project in the future and, as a result, be limited in the amount of effluent that is available for re-use.

(e) In order for the Authority to secure rights for the indirect re-use of Water that has been used by Participant, the Authority, and/or other Participants, Participant agrees to provide the Authority such documents and information and to execute such approvals related to Participant's use of Water and/or the discharge of wastewater effluent by Participant derived from Water as may be reasonably required by the Authority for such purposes. Participant hereby waives any objection or right of protest to the Authority's permit applications for such purposes. No provision of this Contract or the Rate Order shall give the Authority a separate right to regulate or control the quality of the wastewater effluent discharged by Participant; provided, however, the Authority reserves all rights under applicable laws, rules, or regulations to contest the quality of such wastewater effluent discharges.

(f) Notwithstanding any other provision of this Contract, the Authority shall not charge any import fees, or any other fees, rates or charges, to Participant in connection with or due to Participant's re-use of Water, water, or treated wastewater effluent allowed by this Contract, regardless of whether Participant implements such re-use individually or collectively with other Participants or non-Participants.

(g) Subject to the provisions of Section 3.04 hereof, the provisions of this section are not applicable to the direct or indirect re-use of water by Participant from any source other than the Project.

(h) For purposes of determining, for a given period of time, the amount of wastewater effluent of Participant that is derived from Water, the total amount of Participant's wastewater effluent during such time period will be multiplied by a fraction, the numerator of which is the total amount of Water taken by Participant during such time period and the denominator of which is the sum of Participants' total amount of water usage from all sources (including Water) during such time period.

End of the applicable portions of the SJRA GRP Contract.