A Guide to the Interbasin Transfer Act and Regulations

2003 Update

Prepared for the Massachusetts Water Resources Commission by

Office of Water Resources
Department of Conservation and Recreation
Executive Office of Environmental Affairs

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This publication is available electronically at http://www.mass.gov/eea/agencies/dcr/water-res-protection/interbasin-transfer-act/

1.0 INTRODUCTION

The purpose of this guidebook is to explain the Interbasin Transfer Act and describe its review process to potential applicants. This document is just one piece of the information necessary for a thorough understanding of the Interbasin Transfer Act's purpose and procedures. In conjunction with this document, potential applicants should also review

- *The Interbasin Transfer Act (M.G.L. Ch. 21 §§8B-8D)*
- *The Interbasin Transfer Regulations (313 CMR 4.00)*
- *The Interbasin Transfer Performance Standards*
- *The Water Conservation Standards for the Commonwealth of Massachusetts*
- *The application form for a Request for Determination of Applicability*
- *The application form for a Request for Determination of Insignificance*
- *The EIR scopes for a Request for Approval under the Interbasin Transfer Act*

These are available from DRC's Office of Water Resources 617-626-1250 or 617-626-1350 or from the IBT website: www.mass.gov/eea/agencies/dcr/water-res-protection/interbasin-transfer-act/

1.1 Background

The Massachusetts Interbasin Transfer Act (M.G.L. Ch. 21 §§8B-8D) became effective on March 8, 1984. This Act gives the Massachusetts Water Resources Commission (WRC) authority to approve or deny transfers of water or wastewater outside of its river basin of origin. Pursuant to the Act, the WRC promulgated regulations (313 CMR 4.00) defining and delineating the river basins of the Commonwealth, and establishing application procedures and the criteria upon which the WRC bases its decision to approve or deny an interbasin transfer application. The regulations were officially promulgated on July 11, 1985.

The purpose of the Act is to assure that any transfer of water or wastewater from a river basin is done in a way that protects the water-dependant resources of the donor basin. Many rivers and streams in the Commonwealth experience chronic low flows which can potentially degrade fisheries, wetlands, water-based recreation and other water-dependant resources. There are various causes of low flows including the transfer of water out of the basin. Any water transferred out of a river basin, either for water supply or wastewater treatment purposes, is no longer available to replenish the donor basin's rivers, aquifers, lakes or wetlands. This can also impact the availability and viability of water supplies.

The Act requires that the WRC base its decision to approve an Interbasin Transfer, on finding that, at a minimum:

- all reasonable efforts have been made to identify and develop all viable sources in the receiving area of the proposed interbasin transfer;
- all practical measures to conserve water have been taken in the receiving area;
- an environmental review, pursuant to sections 61 and 62 to 62H, inclusive, of Chapter 30 (MEPA) has been complied with for the proposed interbasin transfer;
- a comprehensive forestry management program which balances water yields, wildlife habitat and natural beauty on watershed lands presently serving the receiving area has been implemented;
- a reasonable instream flow is maintained in the river from which the water is diverted.

The WRC regulations added three more criteria for approval:

- In the case of groundwater withdrawals, the results of pumping tests will be used to

indicate the impact of the proposed withdrawal;
- The communities and districts in the receiving area have adopted or are actively engaged in developing a local water resource management plan;
- The Commission shall consider the impacts of all past, authorized or proposed transfers on streamflows in the donor basin.

In 1999, the WRC developed performance standards to outline what must be achieved in order to demonstrate compliance with these criteria. These standards give specific actions that must be taken before applying for approval of a "significant" Interbasin Transfer and provide an important tool to help interpret the meaning of the law and regulations.

1.2 Definition of Interbasin Transfer
An interbasin transfer is defined as any transfer of surface, groundwater, or wastewater of the Commonwealth outside of its river basin of origin. A transfer must cross both a basin boundary and a municipal boundary to be considered an interbasin transfer (see Intra-town Exemption, page 6).

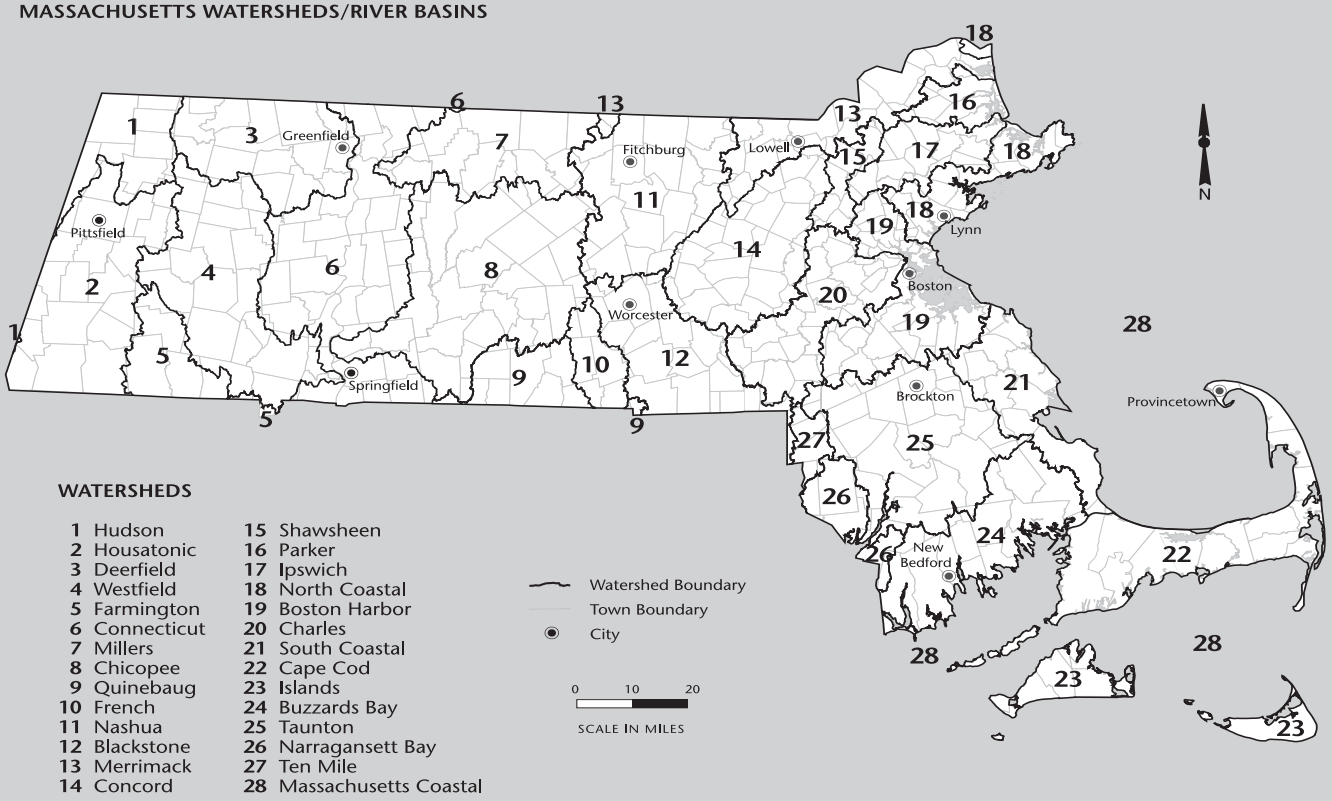
1.3 River basins of The Commonwealth
The river basins (or watersheds) of the Commonwealth were delineated by the WRC in 1985, and are defined in 313 CMR 4.03 as geographic areas within the Commonwealth determined by a body of water and its surrounding drainage area. In addition, the WRC determined that the "ocean" should be a separate basin for both water supply and wastewater purposes (officially designated as Basin 28, the Massachusetts Coastal basin). The Massachusetts Coastal basin includes those areas of the Commonwealth lying below the mean high tide elevation.

The river basin map (Figure 1) was developed with input from the agencies of the Executive Office of Environmental Affairs, the Water Resources Planning Task Force, and Water Resources Commission members. Corresponding descriptions of the river basins were incorporated into the Interbasin Transfer Act regulations.

1.4 Types of interbasin transfers
There are three basic types of interbasin transfers:

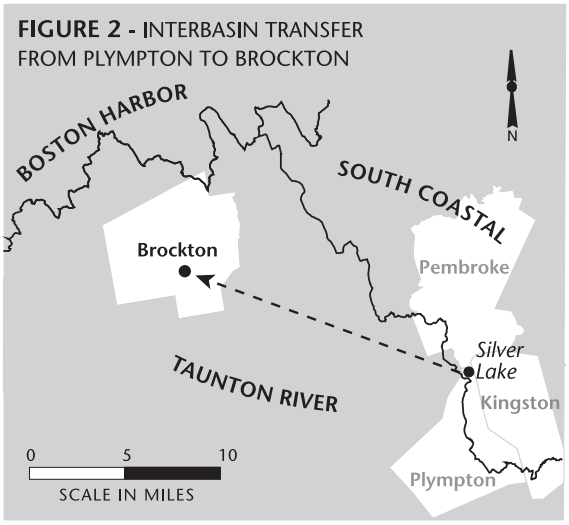
Water Supply: This type of transfer is triggered by the development of a water supply source which is located in a separate river basin and separate community from the proposed user of the water. Water transferred from this proposed source is not returned to its basin of origin for discharge. For example, the water supply from Silver Lake, located in the towns of Kingston, Plympton, and Pembroke, is used in the City of Brockton. Silver Lake is in the South Coastal basin, and Brockton is in the Taunton River basin. The water is used for water supply in the City and is discharged as wastewater through a treatment plant located on a tributary of the Taunton River. Hence, the water is used for water supply in a basin different from its basin of origin and is not returned as wastewater. (See Fig 2)

FIGURE 1-
MASSACHUSETTS WATERSHEDS/RIVER BASINS



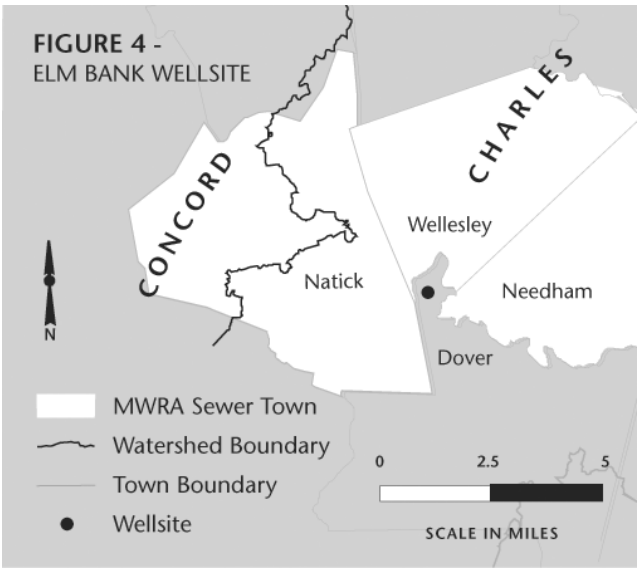
WATERSHEDS

1 Hudson	15 Shawsheen
2 Housatonic	16 Parker
3 Deerfield	17 Ipswich
4 Westfield	18 North Coastal
5 Farmington	19 Boston Harbor
6 Connecticut	20 Charles
7 Millers	21 South Coastal
8 Chicopee	22 Cape Cod
9 Quinebaug	23 Islands
10 French	24 Buzzards Bay
11 Nashua	25 Taunton
12 Blackstone	26 Narragansett Bay
13 Merrimack	27 Ten Mile
14 Concord	28 Massachusetts Coastal



Wastewater Transfer: The second type of transfer is triggered by the development of a system which collects wastewater originating in a basin and community different from the basin and community in which the point of discharge is located. The Massachusetts Water Resources Authority (MWRA) Sewerage Division system is an example of a wastewater transfer. The sewer system serves 43 communities in the metropolitan Boston area. These communities are located in many river basins, many with local water supply sources. The discharge point for this system is the Massachusetts Coastal basin. Water is transferred through this sewer system from its basin of origin either as sanitary sewerage, infiltration, or inflow. Hence, the water transported for treatment and discharge through this system is not returned to its basin of origin. (See Figure 3 on page 5).

Wastewater transfer triggered by development of water supply: The third type of transfer is triggered by the development of a water supply in a community which has a wastewater system with a discharge point in a different community and basin from where the water supply source is located. For example, the town of Natick developed a well-site at the Elm Bank property in Dover, in the Charles River Basin for use by Natick, Dover, Wellesley and Needham. The water from the Elm Bank site will be used entirely within these towns. However, Natick, Wellesley and Needham are members of the MWRA sewer system. Therefore water from this well is transported for treatment and discharge to the Massachusetts Coastal basin and not returned to the basin of origin. (See Figure 4).



1.5 Interpretations of the Act and regulations as they apply to interbasin transfers of wastewater

The approval or denial of an interbasin transfer of wastewater involves different considerations than those applicable to an interbasin transfer of water supply. In 1987, the WRC developed guidelines that were designed to clarify how the Interbasin Transfer Act and regulations are applied to a wastewater transfer. In particular, these interpretations addressed the terms "donor basin" and "receiving area" as used in the criteria of the Act and regulations, in order to evaluate proposed wastewater transfers against certain criteria, as originally intended. In many instances, the Act and regulations require specific actions to be taken in the "receiving area" before approval can be given to a transfer.

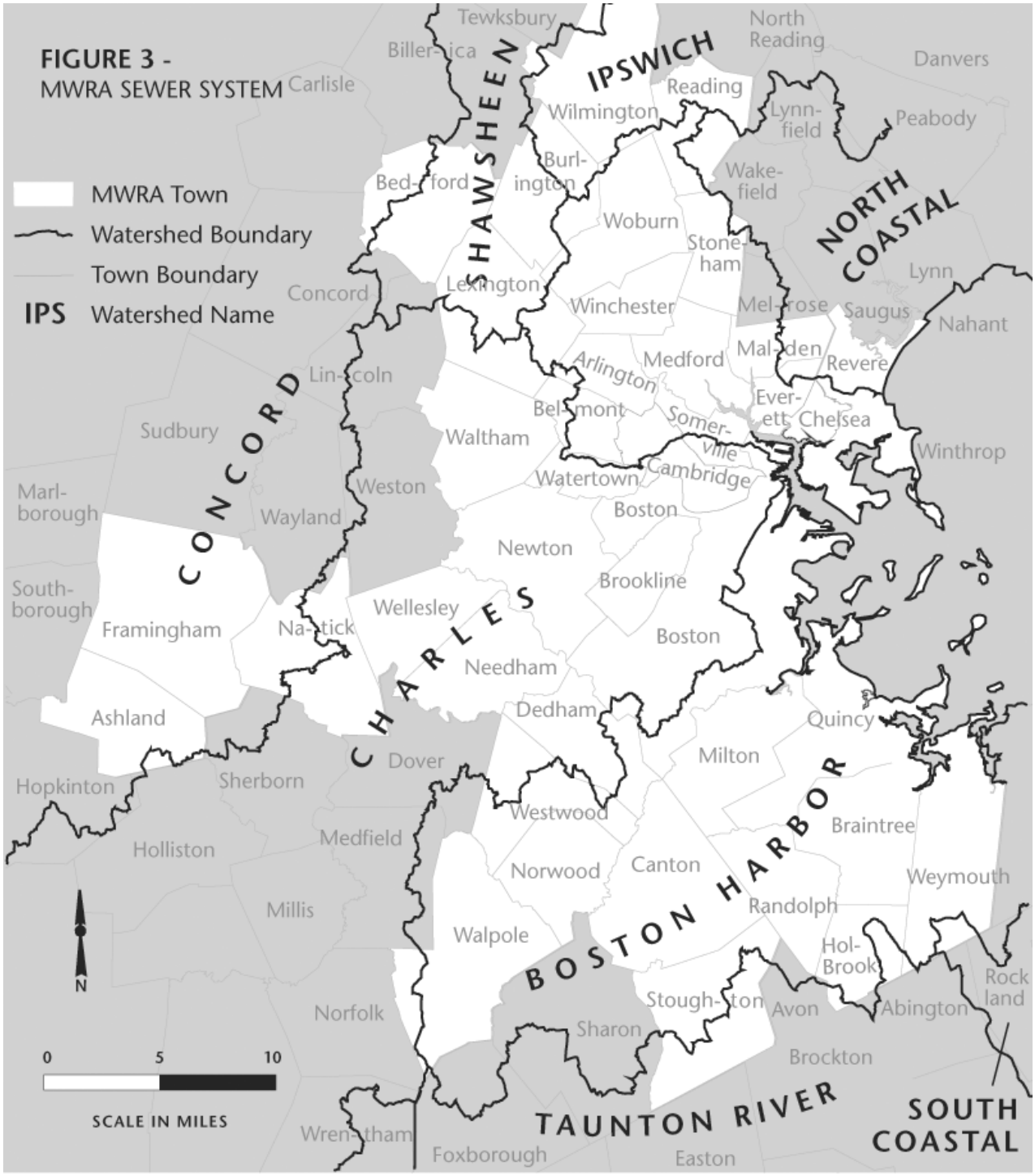


FIGURE 3 -
MWRA SEWER SYSTEM
MWRA Town
Watershed Boundary
Town Boundary
IPS Watershed Name
CONCORD
SHAWSHEEN
IPSWICH
NORTH COASTAL
CHARLES
BOSTON HARBOR
TAUNTON RIVER
SOUTH COASTAL
Tewksbury
North Reading
Billerica
Danvers
Carlisle
Reading
Wilmington
Lynnfield
Peabody
Burlington
Bedford
Wakefield
Woburn
Stoneham
Lynn
Concord
Lexington
Winchester
Melrose
Saugus
Nahant
Medford
Malden
Revere
Arlington
Lincoln
Belmont
Everett
Chelsea
Somerville
Sudbury
Waltham
Winthrop
Cambridge
Watertown
Weston
Marlborough
Wayland
Boston
Newton
Brookline
Southborough
Wellesley
Framingham
Natick
Needham
Ashland
Dedham
Quincy
Dover
Milton
Hopkinton
Sherborn
Westwood
Braintree
Medfield
Holliston
Norwood
Canton
Weymouth
Millis
Randolph
Walpole
Holbrook
Stoughton
Avon
Abington
Rockland
Norfolk
Sharon
Brockton
Wrentham
Foxborough
Easton
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SCALE IN MILES

This does not always make sense with a wastewater transfer, where the wastewater originates in a donor basin, but actions taken in the "receiving area", as generally understood, do not serve to minimize the need for an interbasin transfer, as intended by the Act.

In the case of wastewater transfers, the WRC considers the "receiving area" to be the community(ies) or portion of community(ies) whose wastewater is collected for discharge out of basin via an interbasin transfer. This also is the donor basin.

For wastewater transfers, including those triggered by the development of a local water supply that is transferred out of basin as wastewater, "viable sources in the receiving area" are cost-effective, technologically feasible, environmentally sound wastewater treatment systems, approved by the Department of Environmental Protection, which treat and discharge wastewater within the basin of origin.

The WRC has interpreted the volume of a proposed interbasin transfer of wastewater to be the capacity of the new facility, when operating at the maximum extent physically possible, minus the existing capacity, when operating at the maximum extent physically possible by existing authorized conveyance facilities.[1]

For example, a community wants to enlarge its capacity with an out-of-basin wastewater facility. Currently, this community has a 1 mgd transmission pipeline to this facility. This pipe was designed with an additional 0.5 mgd capacity to transport peak flows during wet weather or high flow conditions, for a total existing capacity of 1.5 mgd. The community is proposing to replace this transmission line with a pipeline which can transport peak flows of up to 4 mgd. Therefore, the volume of the proposed interbasin transfer is 4 mgd - 1.5 mgd = 2.5 mgd.

In addition, the WRC considers the volume of a wastewater transfer to include only that water that originated in the donor basin.

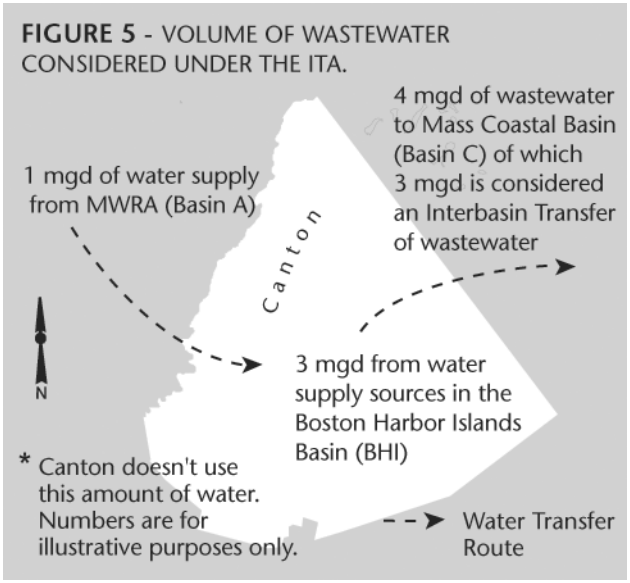
For example: The receiving area is located in Basin B, but gets 1 mgd of its water supply from Basin A. The remaining 3 mgd of its water supply originates locally, in Basin B. All wastewater is discharged in Basin C. Although the total amount of wastewater generated is approximately 4 mgd, only the 3 mgd amount that originated in the "donor basin" is considered the volume of interbasin transfer. An example of this is the town of Canton. Canton is sewered to the MWRA sewer system. Canton receives a portion of its water supply from the MWRA and a portion from sources in the Neponset subbasin of the Boston Harbor basin. If Canton were to expand its connection to the MWRA's sewer system, only that portion of wastewater which originates in the Neponset subbasin would be subject to Interbasin Transfer review (See Figure 5).

The Interbasin Transfer Act Performance Standards for Wastewater Transfers (www.state.ma.us/dem/programs/intbasin/docs/finalps.doc) go into great detail concerning how a proposed wastewater transfer will be evaluated against the criteria of the Act and regulations.

1.6 Intra-town exemption

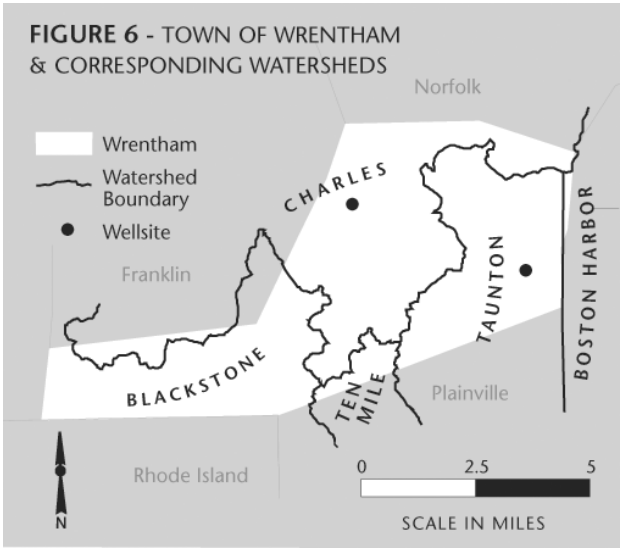
The Interbasin Transfer Act exempts transfers between river basins that occur within the same municipality.

[1] 313 CMR 4.02(j) exempts any portions of a system meant to provide redundancy. Therefore, in a wastewater system, these types of facilities are not included as part of the capacity, as long as the use of these facilities remains solely for redundant purposes.

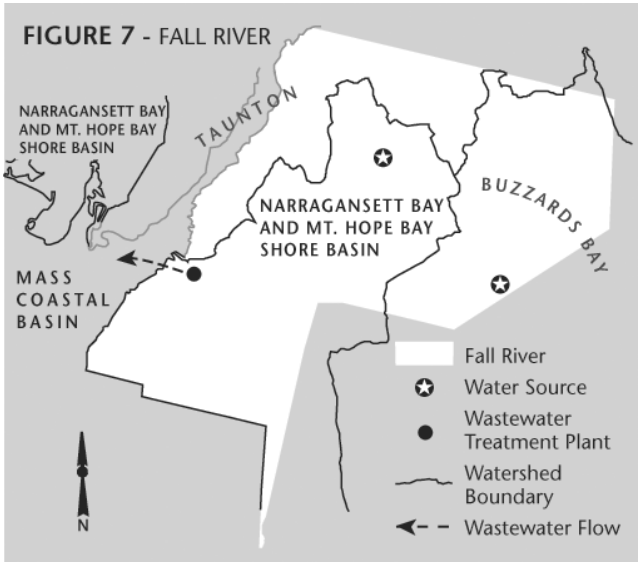


Example: Wrentham has land area in four basins, the Charles, Blackstone, Taunton and Ten Mile basins. It has water supply sources in the Charles River basin and Taunton River basin, but it discharges all of its wastewater within town, via on-site septic systems.[2] Therefore, water supply withdrawals and wastewater discharges are all within town and not subject to the Act. (See Figure 6).

Example: Fall River has land area in the



Taunton River basin, the Buzzards Bay basin, the Narragansett Bay and Mt. Hope Bay Shore basin, and the Massachusetts Coastal basin. The City has water supply sources in the Narragansett Bay and Mt. Hope Bay Shore basin and the Buzzards Bay basin. Its wastewater discharge is to the Massachusetts Coastal basin through its sewage treatment plant. Water supply withdrawals and the wastewater discharge are all within the city and are not subject to the Act. (See Figure 7).



However, note that a community with land area in both basins involved in an interbasin transfer can still be subject to the Act if that water also crosses a town boundary. For example, Essex has land area in both the North Coastal basin and the Massachusetts Coastal basin. Essex is proposing to sewer a portion of town to the Massachusetts Coastal basin via the Gloucester wastewater treatment facility. Therefore, because the wastewater crosses a town boundary and basin boundary for discharge, this action does not qualify for an intra-town exemption and is subject to review under the Act.

[2] At the time of printing, Wrentham is planning an intown wastewater treatment facility. This system will still be exempt under the Act because the wastewater will not cross the community boundary for discharge.

1.7 Actions subject to review under the Interbasin Transfer Act

Review under the Interbasin Transfer Act is triggered by actions that cause an increase in the ability to transfer water or wastewater out of the donor basin. This means an increase in the capacity of any existing water supply or wastewater facilities or an increase over and above the capacity of facilities that meet the definition of "present rate of interbasin transfer" found in the regulations (313 CMR 4.02). Prior to initiating any action to increase the present rate of interbasin transfer, proponents should review the criteria of the Act and discuss the proposed action with Staff from DCR's Office of Water Resources to determine the steps that need to be taken before an Interbasin Transfer application will be considered. Proponents should be in compliance with, or demonstrate the ability to comply with, all applicable criteria either for a determination of insignificance or for approval before pursuing an option which will require Interbasin Transfer Act review.

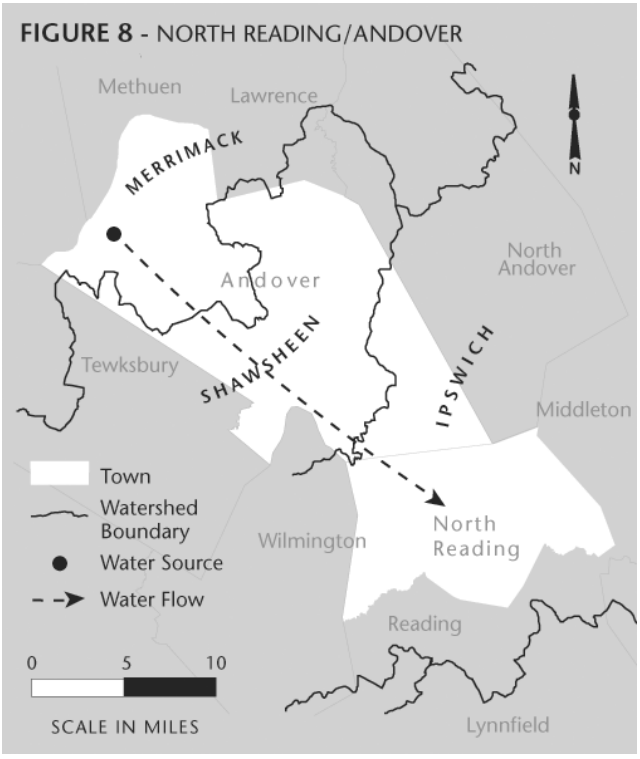
Actions include but are not limited to:

- Drilling new production wells
- Enlargement of reservoirs or storage capacity
- Building transfer facilities, such as pumps, pipelines, tunnels and other conveyance facilities
- Building water filtration plants where such plants increase the ability to transfer water out-of-basin
- Changes in withdrawal constraints contained in any provision of the Massachusetts General Laws, Special Acts, Judicial decree, regulatory agency rule or operating rule of a water supplier.
- Structural change in a wastewater system that causes an increase in the transfer out of basin
- Application for admission to in a regional water or sewer system where an Interbasin Transfer of water is involved.

1.7.1 Examples of actions that have triggered Interbasin Transfer Act review

Building new transfer infrastructure:

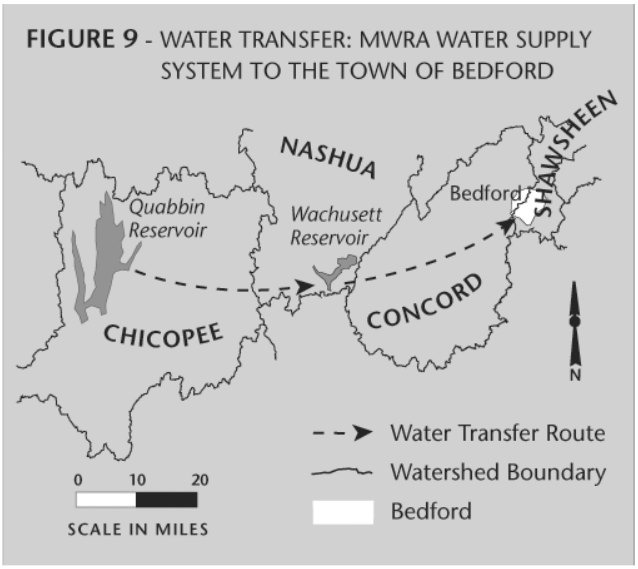
North Reading is located in the Ipswich River basin; Andover's water supply source is located in the Merrimack River basin (Figure 8). North Reading proposed to construct a 12-inch diameter water main to provide an inter-connection with Andover. Water would be purchased from Andover to supplement North Reading's existing supply. The amount of water to be transferred was 1.5 mgd. The transfer was approved in 1991.



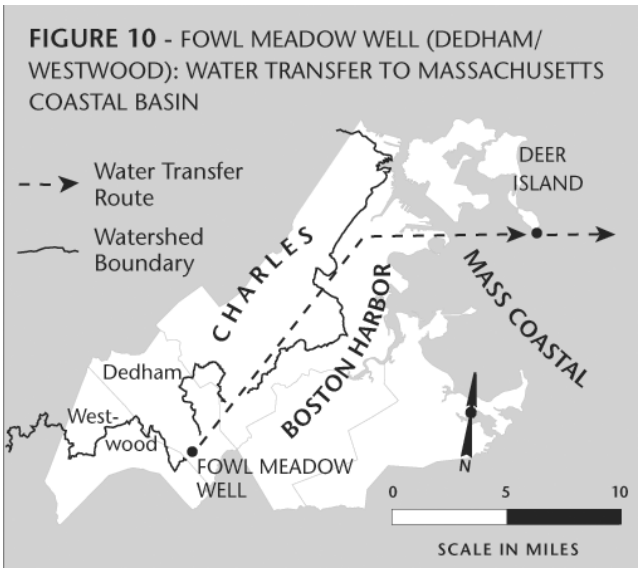
Admission to a regional system:

Bedford has land area in the Shawsheen and Concord River basins. The MWRA's water supply sources are located in the Chicopee and Nashua River basins. In 1978, Bedford lost 80% of its water supply due to groundwater contamination. The town examined several options to replace or rehabilitate its lost supply, and in 1989 applied for admission to the MWRA, to receive up to 1.75 mgd. Application for admission in a regional water supply system

which involves an interbasin transfer represents a change in the operating rules of a water supplier and thus requires approval from the WRC. The transfer was approved in 1992. (See Figure 9)

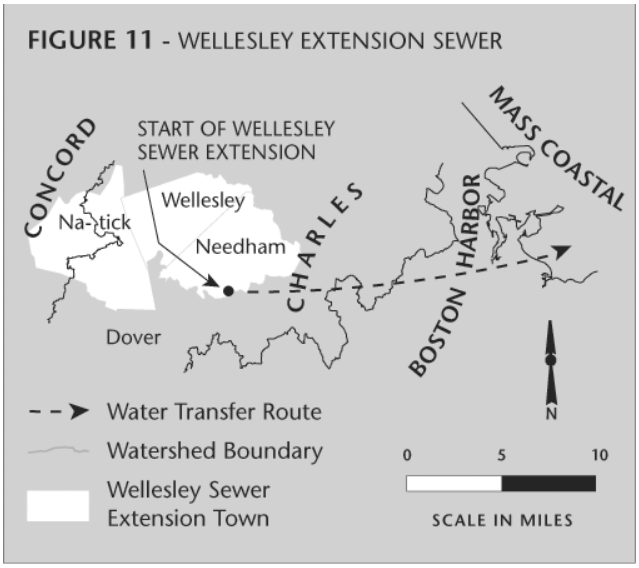


Drilling a new production well:
Development of the Fowl Meadow Well by the Dedham-Westwood Water District: The Dedham-Westwood Water District has land area in the Neponset River subbasin of the Boston Harbor basin and the Charles River basin. The well has a 1.15 mgd capacity and is located in the Neponset River subbasin (See Figure 10).



Wastewater is transferred to the Massachusetts Coastal basin via the MWRA sewer system. The transfer was approved in 1992.

Structural change in a wastewater system:
Replacement of the MWRA's Wellesley Extension Relief Sewer. The sewer accepts flow from the towns of Natick, Wellesley and Needham, which all have local water supply sources in the Concord and Charles River basins. The sewer transports wastewater to the MWRA's Deer Island plant for treatment and discharge to the Massachusetts Coastal basin. In 1987, the MWRA proposed to construct relief facilities to address surcharging and overflow problems in the Wellesley Extension Sewer. These facilities proposed to increase capacity by 4.8 mgd. The transfer was approved in 1988. (See Figure 11)



1.7.2 Actions exempt from review under the Interbasin Transfer Act

The regulations "grandfather" capacity which existed at the time the Act became effective (March 8, 1984). This includes the capacity of water supply or sewer systems that were not completely constructed, but were authorized at the Act's effective date, so long as the capacity of the infrastructure that actually carries the transfer does not increase. A community which

is a member of a regional sewer system may not be 100% sewered, but the connection to the regional system may have been authorized, designed and constructed to accept 100% of the community's flow. Sewer extensions and expansions within these types of systems are exempt from the Act.

Maintenance and replacement activities that do not increase the capacity of a system to transfer water or wastewater out of the basin are exempt from Interbasin Transfer Act review, as are the following actions:

- Replacement of pumps or pipes of similar conveyance capacity
- Restoration of reservoirs to original storage capacity
- Renovation of existing wells and testing of new well sites
- Construction of conveyance facilities to provide redundancy, provided that any increase in capacity cannot be used to increase the ability to transfer water, on an annualized basis, out of the donor basin
- Replacement of existing wastewater conveyance facilities as long as they do not exceed the capacity which existed prior to the effective date of the act or the capacity approved by the WRC since the effective date of the Act.
- The installation and use of water supply and wastewater facilities, which although not fully constructed and/or usable, had achieved MEPA compliance and approval by the Department of Environmental Protection prior to the effective date of the Act
- Expansion within an existing water supply or wastewater system, originally designed and constructed to accommodate larger flows than currently being experienced
- Enlargement of the receiving area, providing this does not increase the existing hydraulic capacity to transfer water out of basin
- Emergency connections that are mandated by DEP under Chapter 21G, Sections 15 and 16.

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2.0 COMPLYING WITH THE INTERBASIN TRANSFER ACT

2.1 Initiation of review

There are four ways a review under the Act can be initiated.

A. Proponent action: Primarily, it is the obligation of the proponent of any project that involves an interbasin transfer to seek review under the Act. Proponents should contact WRC Staff to discuss the applicability of the Act, whether any exemptions apply, and the review process. In cases where jurisdiction, applicability, or other matters related to the implementation of the Interbasin Transfer Act are unclear, Staff will bring the issue to the WRC for discussion.

Review of transfers under the Interbasin Transfer Act can also be initiated in the following manner:

B. MEPA Review: WRC Staff review the Environmental Monitor to determine if projects require Interbasin Transfer review. If it is likely that a project requires Interbasin Transfer review, Staff will draft a letter to the Secretary stating this and recommending that the proponent contact WRC Staff at the earliest possible stage in project development to discuss the review process.

C. Permitting Agency Review: If a permitting agency notes that a project under its review could trigger the Interbasin Transfer Act, it should contact WRC Staff to discuss the project and get an opinion as to whether to refer the proponent to the WRC for Interbasin Transfer review.

D. Public Inquiry: It is the policy of the WRC to respond to all inquiries from the public or interested persons regarding the implementation of the Interbasin Transfer Act. If a person making such an inquiry requires a written response concerning a specific project, she/he should write a letter to the Executive Director of the Water Resources Commission, and include a description of the proposed project based on information available and the identity of the proponent. If the person making this inquiry is not the proponent, a copy of the letter should also be sent to the entity proposing the action which is the subject of the inquiry. The WRC will respond to this letter in a timely manner. In cases where jurisdiction, applicability, or other matters related to the implementation of the Interbasin Transfer Act are unclear, they will be brought to the WRC for discussion. If warranted, the WRC may require that the proponent submit a request for determination of applicability or an application for review under the Act, as outlined in 313 CMR 4.04.

2.2 Levels of review under the act

There is no threshold amount for regulatory review. Any interbasin transfer of any amount, which is not exempt under the Act, is subject to some level of review. There are three levels of review under the regulations:

A. Determination of Applicability: The WRC will review a proposed action to determine if the Act applies. If the action clearly comes under the inclusions or exemptions listed in the regulations, this can be handled expeditiously at the Staff level. However, in cases where jurisdiction, applicability, or other matters related to the implementation of the Interbasin Transfer Act are unclear, the WRC may require the proponent to submit a request for determination of applicability. This is a formal process, with a time line for the WRC's review and determination. Section 3.2 outlines the process.

B. Determination of Insignificance: A Determination of Insignificance is based on the environmental impacts of proposed transfers of less than 1 mgd. The criteria for determining insignificance are listed in 313 CMR 4.04(4). If a transfer is temporary and for non-water supply

purposes, as cited in the definition of insignificant increase found in 313 CMR 4.02, the proponent can annualize the transfer amount, and if it is less than 1 mgd on an annualized basis, the proponent can request a determination of insignificance. Requests are processed according to procedures provided in the regulations. See Section 3.2 for an outline of the process.

Proponents should be aware that a transfer of less than 1 mgd can have significant environmental impacts, depending on where, when and how it will be transferred. If the WRC determines that a transfer of less than 1 mgd could potentially have significant environmental impacts, it can require the proponent to file an application for approval under the Act.

If the WRC determines that a transfer of less than 1 mgd is insignificant, there is no need for any further WRC review.

C. Application for Approval of An Action to Increase the Present Rate of Interbasin Transfer: Transfers of 1 mgd or over must undergo a full review under the Act. There are eight (8) criteria that the WRC must consider when making its decision to approve or deny an application. These are listed in 313 CMR 4.05 and will be discussed in Section 3.3 of this document, which outlines the Application for Approval process.

2.3 Appeals under the act

The Interbasin Transfer Act authorizes the WRC to approve or deny permanent transfers of water or wastewater between river basins. The WRC's decisions are final. There is no independent administrative adjudicatory process under the Interbasin Transfer Act, such as there is under the Water Management Act, administered by the Department of Environmental Protection. However, all actions of the WRC under the Interbasin Transfer Act are carried out pursuant to M.G.L. Chapter 30A, and therefore are appealable through an action filed with the Superior Court.

In addition, if a party feels that there is a "failure to act" under the Interbasin Transfer Act, it may file an action seeking equitable or injunctive relief with the Superior Court.

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3.0 APPLICATION PROCEDURES

3.1 Introduction to the application procedures
Just as there are three levels of review under the Interbasin Transfer Act, there are three different types of application forms/formats.

Application forms for a Request for Determination of Applicability and for a Request for Determination of Insignificance are available from the IBT website at www.mass.gov/eea/agencies/dcr/water-res-protection/interbasin-transfer-act/. The application procedures for these types of reviews are discussed in Section 3.2.

Full Approval under the Act requires an Environmental Impact Report (EIR) under the Massachusetts Environmental Protection Act (MEPA) regulations. The WRC uses the EIR as its "application form" for Interbasin Transfer Approval. The application procedure for Approval is discussed in Section 3.3.

3.2 Requests for Determination of Applicability or Insignificance
As stated earlier, there are formal processes for Requests for Determination of Applicability or of Insignificance. The formal procedure for these processes is outlined in Table 1.

3.3 Application for approval of an action to increase over the present rate of interbasin transfer
Applicants should refer to 313 CMR 4.04(5) for application requirements. The Interbasin Transfer performance standards, adopted by the WRC on August 12, 1999, should also be consulted. Applicants should contact WRC Staff at DCR's Office of Water Resources (617-626-1250 or 617-626-1350) or the Interbasin Transfer website at www.mass.gov/eea/agencies/dcr/water-res-protection/interbasin-transfer-act/ for additional information.

It is important for the proponent to meet with WRC Staff in DCR's Office of Water Resources at the earliest possible stage of project planning to discuss the proposal, as differing local conditions affect the type of information to be included in the application. WRC Staff also will consult with other agency staff as appropriate to determine if sensitive resources which could be impacted by the proposal need to be addressed.

The "application" for approval of an Interbasin Transfer request is now an Environmental Impact Report. Because the MEPA regulations (301 CMR 11.03) require Environmental Impact Reports (EIR) for all Interbasin Transfer applications of 1 mgd or greater, or transfers otherwise considered significant based on the environmental impacts, the WRC has developed scopes to be used in the development of the EIR. These scopes are *only for that portion of the EIR that pertains to the Interbasin Transfer Act*. There may be other issues which need to be addressed in the EIR for a particular project. The MEPA program should be contacted at 617-626-1020 to determine a comprehensive scope for the particular project.

There are four different scopes, each to address a specific type of Interbasin Transfer (available at the Interbasin Transfer website): www.mass.gov/eea/agencies/dcr/water-res-protection/interbasin-transfer-act/

1. **For Water Supply Development:** To be used for the development of a water supply source from which water will be transferred, used, and discharged into a different basin and different community.

2. **For a Wastewater Transfer:** To be used for the development of a new sewage system to transfer wastewater to a different basin and different community for treatment and discharge **OR** the enlargement of the capacity of a connection with a wastewater system which

Table 1: Process for Requesting a Determination of Applicability or Insignificance

Steps	Time Frame
File Request for Determination: *Forms available from DCR Office of Water Resources 617-626-1250 or 617-626-1350 or from the IBT website: www.mass.gov/eea/agencies/dcr/water-res-protection/interbasin-transfer-act/*	
Notice of Receipt: *WRC staff publishes notice of receipt in the Environmental Monitor and sends to the municipalities directly affected*	Within 31 days after receipt of the request
Request Reviewed: *Additional information can be requested*	
Staff Recommendation	
Vote on Request: *For determination of applicability or insignificance, the request must receive a majority roll call vote by the WRC during a public meeting.*	Within 90 days of receipt of request or of all additional requested information
The WRC must publish its determination, with the reasons for the decision, in the Environmental Monitor	

transfers wastewater to a different basin and different community for treatment and discharge.

3. For A Wastewater Transfer Triggered By Development Of A Water Supply: For the development of a water supply to be used in the "donor" basin, but transported out of that basin for treatment and disposal as wastewater.

4. For Communities Seeking Approval Under the Interbasin Transfer Act To Join The MWRA Water Supply System

It is likely that these scopes may need to be modified to address a specific project. Consultation with WRC Staff is strongly recommended to tailor a particular scope to a specific proposal.

The outline of the application for approval of an action to increase the present rate of Interbasin Transfer is presented in Table 2 on page 15.

Table 2: Process for Applying to Increase the Rate of Interbasin Transfer

Steps	Time Frame
Pre-application Conference	
Coordination with MEPA: *Joint scoping session, where possible Preparation of EIR/Application (Interbasin Transfer Scopes available from DCR Office of Water Resources 617-626-1250 or 617-626-1350 or from the IBT website: www.mass.gov/eea/agencies/dcr/water-res-protection/interbasin-transfer-act/)*	
Receipt of Application/EIR: *WRC staff publishes notice of receipt in the Environmental Monitor and sends to the municipalities directly affected*	
MEPA Review	
Review by WRC staff to assure that the application is complete *Additional information can be requested, usually through the MEPA process*	This usually takes 1 month, and will occur concurrently with MEPA review
MEPA Compliance/Acceptance of the Application as Complete: *Once all required information is received and the Secretary of EOEA has issued the final certificate on the EIR, the formal IBT process can begin. If MEPA compliance is the only outstanding issue, technical review can occur, but formal public hearings cannot be held.*	
Publication of Notice of Public Hearings in the Environmental Monitor	
WRC Staff Technical Review	
Public Hearings: *Two public hearings, one in the donor basin and one in the receiving basin, must be held. The WRC can require additional hearings if necessary*	60 days after the application is accepted as complete, but not before 21 days after publication of Notice of Public Hearings in the Environmental Monitor
WRC Staff Recommendation Presented	16 to 31 days after the last public hearing. The Staff Recommendation is presented at a regularly scheduled WRC meeting *The WRC meets on the second Thursday of every month*
Public Hearing on the WRC Staff Recommendation: *The WRC takes comments on the Staff Recommendation*	14 to 21 days after the Staff Recommendation is presented at a regular WRC meeting
WRC Decision: *Approval or denial of an application requires a majority roll call vote during a public meeting*	Within 60 days of the final public hearing
Filing of WRC Decision: *A written report of the findings and justifications of the WRC decision must be filed with the House and Senate Clerks and the Secretary of State*	Within 30 days of the WRC vote
Publication of Decision: *The Decision is published in the Massachusetts Register by the Secretary of State*	

3.4 Criteria for approval under the act

The Interbasin Transfer regulations, 313 CMR 4.05, list eight criteria that the Commission must consider when making its decision to approve or deny a proposed transfer. These are listed below. The Interbasin Transfer Act Performance Standards (http://www.mass.gov/eea/docs/dcr/watersupply/intbasin/finalps.pdf) list actions which should be taken to demonstrate compliance with the criteria.

1. The MEPA process must be completed. The MEPA regulations require an Environmental Impact Report (EIR) for all Interbasin Transfer applications for approval. The WRC will use the EIR as its application and will use the MEPA process to request the information needed for its review. The WRC Staff technical review can be concurrent with the MEPA review, however the WRC cannot hold public hearings nor make a decision to approve or deny an application until the MEPA process has been completed.

2. All reasonable efforts must have been made to identify and develop all viable sources in the receiving area of the proposed interbasin transfer. For **water supply transfers**, a viable source means one which can provide drinking water that meets the current water quality standards promulgated by the Department of Environmental Protection at a production cost which is reasonable when compared to costs recently incurred elsewhere in the Commonwealth, and which can be used while preserving reasonable instream flow, as determined by the same criteria provided to evaluate impacts on the donor basin. For **wastewater transfers**, viable source means a cost-effective, technologically feasible, environmentally sound wastewater treatment system which treats and discharges wastewater within the basin of origin, and has been approved by Department of Environmental Protection. Such systems can include, but are not limited to conventional Title 5 systems, groundwater discharge systems, NPDES-regulated surface water discharge systems, alternative/innovative systems, package treatment plants, water reuse or other systems to be approved by DEP.

3. All practical measures to conserve water must have been taken in the receiving area. The WRC approved Water Conservation Standards for the Commonwealth in 1992 and Interbasin Transfer Performance Standards for water conservation (and other criteria) in 1999. A proponent's water conservation efforts must meet the standards contained in both of these documents (or the latest versions) before a transfer can be approved.
For wastewater transfers, the WRC interprets "all practical measures to conserve water" to include an active program to eliminate sources of inflow and infiltration that are cost- and value-effective in the donor basin. In addition, a DEP-approved Operation and Maintenance plan for the wastewater system must be in place. The Interbasin Transfer Performance Standards list specific measures that must be taken to meet this criterion. For the purposes of evaluating compliance with this criterion for water supply, receiving area means the area which makes use of the water supply which has been transferred between basins. For wastewater transfers, receiving area is defined as the community(ies) or portion of community(ies) whose wastewater is collected for discharge out of basin via an interbasin transfer.

4. For communities which have existing surface water sources, a comprehensive forestry management program on watershed lands serving the receiving area and under the control of the proponent must have been implemented. A description of what should

be included in this program is in the Interbasin Transfer Performance Standards.

5. The WRC must determine that reasonable instream flow in the river from which the water is transferred is maintained. This is done on a case by case basis. There are several environmental resources listed under this criterion that must be considered in addition to streamflow. In some cases, it may be more appropriate to focus on these environmental resources. The proponent should consult with WRC staff concerning the types of data and analyses required to assist the WRC in determining if this criterion is met.

6. The results of the pumping test will be used to indicate the environmental impacts of the proposed withdrawal in the case of groundwater withdrawals. If a proponent is designing a pumping test for a well that could trigger Interbasin Transfer review, consultation with WRC Staff during the development of the pumping test proposal is recommended so that the appropriate data can be collected during the test.

7. The communities and districts in the receiving area must either have adopted or be actively engaged in developing a local water resources management plan. The plan must conform with the guidance outlined in Appendix B of the 1999 (or latest version) Interbasin Transfer Performance Standards. For the purposes of this criterion, receiving area has the same definitions as apply under the conservation criterion.

8. The Commission shall consider the impacts of all past, authorized or proposed transfers on streamflows in the donor basin when making its decision. Therefore, the proponent should provide any information available to assist the WRC in assessing the "cumulative" impacts of the proposed transfer.

ATTACHMENT A

MGL Chapter 21 Sections 8B-8D: The Interbasin Transfer Act

Section 8B: Definitions applicable to sections. 8B - 8D.
The following words and phrases, as used in this section and sections eight C and eight D, shall have the following meanings:

"Commission", the water resources commission.
"Interbasin transfer", any transfer of the surface and groundwaters, including wastewater, of the commonwealth outside a river basin. If a city or town partially situated within a river basin takes waters from that basin, extension of water services to a portion of the same city or town outside the basin shall not be deemed an interbasin transfer of water.
"Insignificant increase", an increase insufficient to invoke the provisions of section eight C and eight D as determined by the commission; provided, however, that in no event shall an increase over one million gallons per day be deemed insignificant.
"River basin", a geographic area within the commonwealth determined by a body of water and its surrounding drainage area as delineated by the commission.

Section 8C: Increase in interbasin transfers of surface and groundwater; approval; exemption.
Any increase over the present rate of interbasin transfers of the surface or groundwater of the river basin shall require the approval of the commission, notwithstanding the provisions of any law to the contrary to increase a present interbasin transfer in addition to such other approvals that may be required by law. Said commission shall file a report of its findings, justifications, and decisions in relation to such approval or disapproval, with the clerks of the house of representatives and the senate, and with the state secretary for publication in the Massachusetts register.

Any emergency connections either approved under the provisions of sections forty and forty-one A of chapter forty, or authorized by a law to provide a necessary and adequate water supply shall be exempt from the provisions of this section for a period not to exceed six months of any calendar year, so long as they fulfill the criteria of the division of water supply of the department of environmental protection. The provisions of this section and section eight D shall not apply to any insignificant increase over the present rate of interbasin transfers of the surface and groundwater of a river basin. The criteria for determining any insignificance shall be established by the commission based upon the impact to the donor basin.

Section 8D: Rules and regulations; criteria for approval; hearings; procedure.
The commission shall promulgate rules and regulations defining and delineating the river basins of the commonwealth, and establish application procedures and criteria upon which the commission shall base its approval or disapproval of any proposed interbasin transfer of waters. Said criteria shall include but not be limited to the following:
(1) that all reasonable efforts have been made to identify and develop all viable sources in the receiving area of the proposed interbasin transfer,
(2) that all practical measures to conserve water have been taken in the receiving area, including but not limited to the following:

(a) the identification of distribution system sources of lost water, and where cost effective, the implementation of a program of leak detection and repair;
(b) metering of all water users in the receiving area and a program of meter maintenance;

(c) implementation of rate structures which reflect the costs of operation, proper maintenance and water conservation and encourage the same;
(d) public information programs to promote water conservation, including industrial and commercial recycling and reuse; and
(e) contingency plans for limiting use of water during seasonal or drought shortages;

(3) that an environmental review pursuant to section sixty-one and sections sixty-two to sixty-two H, inclusive, of chapter thirty has been complied with for the proposed interbasin transfer,
(4) that a comprehensive forestry management program which balances water yields, wildlife habitat and natural beauty on watershed lands presently serving the receiving area has been implemented,
(5) that reasonable instream flow in the river from which the water is diverted is maintained, said reasonable instream flow shall be determined by the commission in making its determination of applicability of the proposed interbasin transfer of water.

The decision of the commission to approve or deny a proposed interbasin transfer shall be determined after at least two public hearings, one of which shall be held in the proposed donor community and one of which shall be held in the receiving community and which shall take place after compliance with said sections sixty-one and sixty-two to sixty-two H, inclusive, of chapter thirty. All proceedings under sections eight C and eight D shall be subject to the provisions of chapter thirty A.

The Interbasin Transfer Regulations, 313 CMR 4.00 can be accessed at:
http://www.mass.gov/eea/agencies/dcr/water-res-protection/interbasin-transfer-act/

The regulations are also available from DCR's Office of Water Resources: 617-626-1350 or through the State Bookstore at One Ashburton Place, Room 1613; 617-727-2831.

ATTACHMENT B

Glossary of Terms Used in this Guidebook

NOTE: These definitions do not supercede those in 313 CMR 4.02, which provide more extensive legal definitions of the terms used in interbasin transfer review. *They are provided to aid the reader in review of the explanatory materials.*

Ability to transfer water out of basin: The hydraulic capacity of an interbasin transfer system.
Donor Basin: The basin of origin for the water is or wastewater that is to be transferred.
Emergency Connection: Emergency connections utilized through an official emergency declaration issued by the Department of Environmental Protection or authorized by law to provide a necessary and adequate water supply are exempt under the Act. Such declarations cannot exceed a period of six months of any calendar year and must fulfill the criteria of DEP's Drinking Water Program.
Insignificant Increase: An increase of less than 1 mgd, provided that the Water Resources Commission has determined it to have a minor impact on the environmental resources of the donor basin, based on the criteria listed in the regulations 313 CMR 4.04(4).
Interbasin Transfer: Any transfer of water or wastewater outside of a river basin of the Commonwealth. There are three (3) basic types of interbasin transfers:

- **Interbasin Transfer of Water Supply**: development or increase of a water supply source or system to be transferred, used and discharged into a different basin and different community
- **Interbasin Transfer of Wastewater**: development a new sewerage system to transfer wastewater to a different basin and different community for treatment and discharge OR enlargement of the capacity of a connection with a wastewater system which transfers wastewater to a different basin and different community for treatment and discharge
- **Interbasin Transfer of Wastewater Transfer Triggered By Development Of A Water Supply**: development of a water supply, to be used in the "donor" basin, but transported out of that basin for treatment and disposal as wastewater

Intra-town Exemption: Transfers of water or wastewater across basin boundaries, but within a single town are exempt under the Act.
Receiving area: The area which makes use of the water supply which has been transferred between basins. In the case of *wastewater transfers*, the community(ies) or portion of community(ies) whose wastewater is collected for discharge out of basin via an interbasin transfer.
River Basin: A geographic area within the Commonwealth determined by a body of water and its surrounding drainage area as defined and determined by the Commission, described in 313 CMR 4.03 and delineated on the river basin map(s) adopted by the Commission in 1986. River basins are also known as *watersheds* or *catchment areas*.
Viable Sources: For water supply transfers, sources which can provide drinking water that meets current water quality standards at a reasonable production cost, and which can be used while preserving reasonable instream flow in the donor basin. For wastewater transfers, including those triggered by the development of a local water supply that is transferred out of basin as wastewater, cost-effective, technologically feasible, environmentally sound wastewater treatment systems which treat and discharge wastewater within the basin of origin, and have been approved by the Department of Environmental Protection. Such systems can include, but are not limited to, conventional Title 5 systems, groundwater discharge systems, NPDES-regulated surface water discharge systems, alternative/innovative on-site systems or package treatment plants.