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|  | THE COMMONWEALTH OF MASSACHUSETTSWATER RESOURCES COMMISSION100 Cambridge Street, Boston MA 02114 |

**INTERBASIN TRANSFER ACT – Request for Determination of Insignificance**

***It is strongly recommended that a potential applicant meet with WRC Staff at the earliest possible point in the planning process to determine the type of information and analyses required to address a particular project under a Request for Determination of Insignificance. There are data and analyses that Staff may be able assist with and/or provide.***

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| --- |
| For Official Use OnlyDate Received      Project Number      Recommendation      Decision       |

**1. SUMMARY**

|  |  |
| --- | --- |
| Project Name |       |
| Project Location (Community/River Basin) |       |
| Project Proponent |       |
| Address |       |
| Phone |       |
| Email |       |
| Submitted By |       |
| Address |       |
| Phone |       |
| Email |       |

**2. FOR ALL REQUESTS FOR A DETERMINATION OF INSIGNIFICANCE**

A. Describe the Proposed Project, including the purpose for which the water/wastewater is to be transferred.

B. Has the project been filed under the Massachusetts Environmental Protection Act (MEPA)?

Yes **[ ]** No [ ]

If Yes, EEA Number

EEA Action and Date

C. List of the Local, State, or Federal agencies/commissions from which permits have been obtained or will be sought.

 Agency Name Type of Permit Project Number

D. Describe the approximate timetable for the project.

E. State below the increase in present rate of Interbasin Transfer of water/wastewater that will result from the proposed action in terms of maximum daily capacity (in gallons per day) and describe how this increase was determined. Also provide the increase in annual average daily capacity. Use the maximum daily capacity in the required environmental analyses for this request.

F. Provide a map or maps (at an appropriate scale) showing:

 ● The name and exact location of the source(s) of the proposed transfer of water/wastewater

 ● The major River Basin(s) of the affected area(s)

 ● Any potentially affected water bodies

 ● The communities, sections of communities, water or sewer districts, or other areas that will use the water proposed to be transferred or benefit from the proposed wastewater transfer

 ● The location of the wastewater discharge point (for both water supply and wastewater transfers)

 ● Any areas with special resource values (see 313 CMR 4.08(3)(f)) that could potentially be affected

 ● For wastewater transfers, delineate:

 ○ the areas to be sewered, and/or

 ○ the areas where the capacity of an existing sewer is proposed to be enlarged and the service area of the existing facility

G. In addition, provide a brief narrative description of the information shown on this map.

H. Describe the operating schedule of the proposed transfer of water/wastewater.

I. Temporary Transfers

 Yes No

Will the proposed increase in Interbasin Transfer be temporary? [ ]  [ ]

If yes, will it be used:

(1) to facilitate the construction, maintenance or repair of a [ ]  [ ]
public utility?

(2) for flood control purposes? [ ]  [ ]

(3) for public safety purposes? [ ]  [ ]

(4) for another purpose not related to water supply use or [ ]  [ ]
wastewater service?

(5) Provide the time and duration of the transfer:

(6) Provide the maximum daily and the annualized average amounts to be transferred:

Explanation:

J. Provide any additional information that would be useful to the Commission in reviewing your request (refer to 313 CMR 4.00)

M. For a transfer request with a maximum daily capacity of 10,000 gallons per day or less, no further information is needed as part of this application. After review of this information, if the Commission requires further analysis**,** Staff will contact the applicant to discuss the additional information needed to make a determination on the proposal.

**3. FOR ALL TRANSFERS GREATER THAN 10,000 GALLONS PER DAY BUT LESS THAN 1 MILLION GALLONS PER DAY**

A. Will the proposed action have an adverse effect on the
following special resource values in the donor basin. **NOTE:**Prior consultation with the agencies noted below is advised. Yes No

1. Endangered species of plants and animals or their habitats [ ]  [ ]
(Department of Fish and Game’s Natural Heritage and
Endangered Species Program)
<http://maps.massgis.state.ma.us/PRI_EST_HAB/viewer.htm>)

Explanation Source

2. Fisheries Resources, including coldwater fisheries, river [ ]  [ ]
herring, eelgrass and shellfish beds (Department of Fish and
Game’s Divisions of Fisheries and Wildlife and Division of Marine
Fisheries) <https://www.mass.gov/orgs/department-of-fish-and-game>)

Explanation Source

3. Areas of Critical Environmental Concern (ACEC) [ ]  [ ]
(Department of Conservation and Recreation’s ACEC program) <https://www.mass.gov/service-details/acec-program-overview>

Explanation Source

4. Designated State or Federal Scenic River (Department of [ ]  [ ]
Conservation and Recreation’s Scenic Rivers Program 413-586-
8706 x 18 and the Federal Wild and Scenic River Program) [https://www.nps.gov/orgs/1912/partnership-wild-and-scenic-
river-contacts.htm](https://www.nps.gov/orgs/1912/partnership-wild-and-scenic-river-contacts.htm)

Explanation Source

5. Geographic areas (e.g., parks, conservation lands) protected [ ]  [ ]
by Article 97 of the Massachusetts Constitution

Explanation Source

6. Vernal Pools (Department of Fish and Game’s Natural [ ]  [ ]
Heritage and Endangered Species Program) [https://www.mass.gov/
orgs/masswildlifes-natural-heritage-endangered-species-program](https://www.mass.gov/orgs/masswildlifes-natural-heritage-endangered-species-program) )

Explanation Source

7. Lakes, ponds, wetlands or other surface water features [ ]  [ ]

Explanation Source

8. Provide a map or maps (at an appropriate scale) showing the information requested in Section 3.A above.

B. For transfers from sources that are upstream or upgradient of permitted wastewater treatment facilities, provide:

 a. 7Q10 flow(s) used in the NPDES Permits of all wastewater treatment facilities that discharge downstream of transfer source(s);

 b. Recalculated 7Q10 flow(s) that include the proposed transfer;

 c. Description of how the transfer will affect the 7Q10 flow(s) and the permitted wastewater facilities downstream;

 d. Verification that the permitting authority for the wastewater treatment facilities has been notified of the Person’s proposed action to increase the Present Rate of Interbasin Transfer and a copy of that notification.

C. For a wastewater transfer, the following information must also be provided:

1. State reasons why in-basin disposal is not feasible. If available, include a copy of or link to the Department of Environmental Protection (DEP)-approved Comprehensive Wastewater Management Plan, which evaluates potential in-basin sources of disposal, including Title 5, groundwater, and surface water discharge. Discuss the feasibility of implementing DEP’s wastewater reuse policy.

2. For Interbasin Transfers that will discharge wastewater to a permitted wastewater treatment facility, provide:

 a. Available capacity of said wastewater treatment facility

 b. Verification that the permitting authority for the wastewater treatment facilities has been notified of the proposed action and a copy of that notification.

D. Cumulative Impacts On The Donor Basin

1. List and describe the impact of all past, authorized and other proposed transfers on the streamflow, groundwater, lakes, ponds, reservoirs, or other impoundments of the donor basin and relevant subbasins. Then describe the impacts of the addition of the proposed transfer, in conjunction with these other transfers.

2. Describe the proposed transfer’s impact on other authorized water users in the donor basin.

**4. FOR TRANSFERS DERIVED PRIMARILY FROM STREAMFLOW**

Describe the impact of the proposed interbasin transfer on the streamflow of the donor basin. An electronic copy of the data used should be submitted with the application.

*The Interbasin Transfer regulations: 313 CMR 4.08(3) Criteria for Determining Insignificance, require that for transfers derived primarily from streamflow, the cumulative flow to be withdrawn is in all cases less than five percent (5%) of the unimpacted ninety-five percent (95%) exceedance flow as estimated at an appropriate point of the donor river or tributary thereto*. *A proponent of this sort of transfer must also meet the applicable criteria listed in 313 CMR 4.08(3)(a) through (c) and (e) through (h)*.

A. Provide the estimated unimpacted 95% exceedance flow as measured at an appropriate point on the donor river or tributary thereto. Prior consultation with WRC Staff is necessary to determine how to conduct this analysis. The applicant can use the USGS StreamStats which is a web-based application located at <https://streamstats.usgs.gov/ss/>, the USGS’s Safe Yield Estimator, or other methods, as long as the full POR is considered and the POR is at least 10 years.

B. Is the cumulative volume of the transfer (to include all other past, authorized transfers) less than 5% of the 95% exceedance flow?

C. Prepare and enclose the 1964-to-date hydrograph of daily flow at a USGS gage at an appropriate point on said river or tributary with superimposition thereon of the reduced flow that would occur as a result of the proposed transfer. (Should be simulated if USGS records are not available for that period.)

D. Provide the data used to construct the hydrographrequired in C. electronically. (showing the historical daily flows and the percentage of flow that would have been reduced, had the interbasin transfer been in operation.)

E. Describe any proposed flow management provisions, flow protection thresholds, mitigation measures or other measures proposed to minimize or offset impacts of the transfer.

**5. FOR TRANSFERS DERIVED PRIMARILY FROM LAKES, PONDS, RESERVOIRS OR OTHER IMPOUNDMENTS**

*The Interbasin Transfer regulations 313 CMR 4.08(3) Criteria for Determining Insignificance, require that for transfers derived primarily from lakes, ponds, reservoirs or other impoundments (either directly or through groundwater withdrawals), the cumulative annual amount of the transfers including the proposed amount, in all cases, is less than one percent (1%) of the average annual precipitation on the drainage area of the water body, and five percent (5%) of the drought year inflow to the water body. A proponent of this sort of transfer must also meet the applicable criteria listed in 313 CMR 4.08(3)(a) and (b) and (e) through (h)*.

Drainage areas referred to in the calculations below are the drainage area of the water supply source or surface water impoundment(s). For cases where there are multiple reservoirs supplying a system, calculations are to be made using the entire drainage area for the whole system. Drainage areas can be determined using the USGS StreamStats application (https://streamstats.usgs.gov/ss/).

A. Estimate one percent of the average annual precipitation on the drainage areas of the water body in million gallons per day (MGD) by following these steps:

 1. Determine in which Region the water body is located by consulting Appendix A, Section 1.

 Region:

 2. Select the apporpriate Region’s muliplier by referring to Appendix A, Section 2
 and multiply by the drainage area.

       X       =       **MGD**

 Drainage Area (square miles) X (precipitation multiplier) = **MGD**

B. Estimate the volume of the five percent of drought year inflow (DYI) by selecting the apporpriate 5% DYI value in Appendix B and multiply it by the drainage area.

       X       =       **MGD**

 Drainage Area (square miles) X (5% DYI value) = **MGD**

C. Describe any proposed flow augmentation provisions, flow protection thresholds, mitigation measures or other measures proposed to protect instream flow.

|  |  |  |
| --- | --- | --- |
| Date | Signature of Responsible Officer | Name (print or type) |
|       |       |       |
| Date | Signature of Person Preparing the Request (if different than above) | Name (print or type) |
|       |       |       |

Note: Additional pages may be used to complete answers

*Prepared for the Water Resources Commission by the Department of Conservation and Recreation, Office of Water Resources: August 2018.*

**APPENDIX A**

 **Maximum Potential Insignificant Surface Water Transfers for Transfers Derived Primarily from Lakes, Ponds, Reservoirs or Other Impoundments**

*To be Updated when the Massachusetts Drought Management Plan is Revised*

1.Select the appropriate town(s) from the following list:

**MASSACHUSETTS TOWNS BY REGION**

**CAPE COD REGION**

Barnstable

Bourne

Brewster

Chatham

Chilmark

Dennis

Eastham

Edgartown

Falmouth

Gay Head

Gosnold

Harwich

Mashpee

Nantucket

Oak Bluffs

Orleans

Provincetown

Sandwich

Tisbury

Truro

Wellfleet

West Tisbury

Yarmouth

**ISLANDS**

**CENTRAL REGION**

Ashburnham

Ashby

Athol

Auburn

Barre

Boylston

Brookfield

Charlton

Douglas

Dudley

East Brookfield

Fitchburg

Gardner

Grafton

Hardwick

Holden

Hubbardston

Leicester

Leominster

Lunenburg

Millbury

New Braintree

North Brookfield

Northbridge

Oakham

Oxford

Paxton

Petersham

Phillipston

Princeton

Royalston

Rutland

Shrewsbury

Southbridge

Spencer

Sterling

Sturbridge

Sutton

Templeton

Townsend

Uxbridge

Warren

Webster

West Boylston

West Brookfield

Westminster

Winchendon

Worcester

**CONNECTICUT RIVER REGION**

Agawam

Amherst

Ashfield

Belchertown

Bernardston

Blandford

Brimfield

Buckland

Charlemont

Chester

Chesterfield

Chicopee

Colrain

Conway

Cummington

Deerfield

East Longmeadow

Easthampton

Erving

Gill

Goshen

Granby

Granville

Greenfield

Hadley

Hampden

Hatfield

Hawley

Heath

Holland

Holyoke

Huntington

Leverett

Leyden

Longmeadow

Ludlow

Middlefield

Monroe

Monson

Montague

Montgomery

New Salem

Northampton

Northfield

Orange

Palmer

Pelham

Plainfield

Rowe

Russell

Shelburne

Shutesbury

South Hadley

Southampton

Southwick

Springfield

Sunderland

Tolland

Wales

Ware

Warwick

Wendell

West Springfield

Westfield

Westhampton

Whately

Wilbraham

Williamsburg

Worthington

**NORTHEAST REGION**

Acton

Amesbury

Andover

Arlington

Ashland

Ayer

Bedford

Belmont

Berlin

Beverly

Billerica

Bolton

Boston

Boxborough

Boxford

Braintree

Brookline

Burlington

Cambridge

Canton

Carlisle

Chelmsford

Chelsea

Clinton

Cohasset

Concord

Danvers

Dedham

Dover

Dracut

Dunstable

Essex

Everett

Framingham

Georgetown

Gloucester

Groton

Groveland

Hamilton

Harvard

Haverhill

Hingham

Holbrook

Hopkinton

Hudson

Hull

Ipswich

Lancaster

Lawrence

Lexington

Lincoln

Littleton

Lowell

Lynn

Lynnfield

Malden

Manchester

Marblehead

Marlborough

Maynard

Medford

Melrose

Merrimac

Methuen

Middleton

Milton

Nahant

Natick

Needham

Newbury

Newburyport

Newton

North Andover

North Reading

Northborough

Norwood

Peabody

Pepperell

Quincy

Randolph

Reading

Revere

Rockport

Rowley

Salem

Salisbury

Saugus

Scituate

Shirley

Somerville

Southborough

Stoneham

Stow

Sudbury

Swampscott

Tewksbury

Topsfield

Tyngsborough

Wakefield

Waltham

Watertown

Wayland

Wellesley

Wenham

West Newbury

Westborough

Westford

Weston

Westwood

Weymouth

Wilmington

Winchester

Winthrop

Woburn

**SOUTHEAST REGION**

Abington

Acushnet

Attleboro

Avon

Bellingham

Berkley

Blackstone

Bridgewater

Brockton

Carver

Dartmouth

Dighton

Duxbury

East Bridgewater

Easton

Fairhaven

Fall River

Foxborough

Franklin

Freetown

Halifax

Hanover

Hanson

Holliston

Hopedale

Kingston

Lakeville

Mansfield

Marion

Marshfield

Mattapoisett

Medfield

Medway

Mendon

Middleborough

Milford

Millis

Millville

New Bedford

Norfolk

North Attleborough

Norton

Norwell

Pembroke

Plainville

Plymouth

Plympton

Raynham

Rehoboth

Rochester

Rockland

Seekonk

Sharon

Sherborn

Somerset

Stoughton

Swansea

Taunton

Upton

Walpole

Wareham

West Bridgewater

Westport

Whitman

Wrentham

**WESTERN REGION**

Adams

Alford

Becket

Cheshire

Clarksburg

Dalton

Egremont

Florida

Great Barrington

Hancock

Hinsdale

Lanesborough

Lee

Lenox

Monterey

Mount Washington

New Ashford

New Marlborough

North Adams

Otis

Peru

Pittsfield

Richmond

Sandisfield

Savoy

Sheffield

Stockbridge

Tyringham

Washington

West Stockbridge

Williamstown

Windsor

2. Select the multiplier of the appopriate region and enter it in Section 5.A.2:

|  |  |
| --- | --- |
| **Region** | **Precipitation Multiplier** |
| West | 0.0213 |
| Connecticut River Valley | 0.0218 |
| Central | 0.0221 |
| Northeast | 0.0210 |
| Southeast | 0.0221 |
| Cape Cod  | 0.0215 |
| Islands |  |

The mulitpliers above were calculated from the long-term average annual precipitation for each region, unit conversion factors and the one percent fraction to arrive at a value in units of MGD. The precipitation averages used for each region are shown in the table below for reference.

|  |  |
| --- | --- |
| **Region** | **Average Annual Precpitation (inches)** |
| West | 44.67 |
| Connecticut River Valley | 45.76 |
| Central | 46.34 |
| Northeast | 44.11 |
| Southeast | 46.33 |
| Cape Cod  | 45.13 |
| Islands |  |

**APPENDIX B**

Select the 5% DYI value from the table below depending on the major basin within which the water body is located. Enter this value in Section 5.B.

|  |  |  |  |
| --- | --- | --- | --- |
| **Major Basin** | **Basin Yield as Monthly Q90 Exceedance Flow (cfsm)** | **Drought Year** **Inflow (DYI)** **(MGD/sqmi)** | **5% DYI** **(MGD/sqmi)** |
| Boston Harbor Mystic | 0.5344 | 0.3454 | 0.0173 |
| Boston Harbor Neponset | 0.5596 | 0.3618 | 0.0181 |
| Boston Harbor Weymouth/ Weir | 0.4900 | 0.3167 | 0.0158 |
| Blackstone | 0.5964 | 0.3855 | 0.0193 |
| Charles | 0.5816 | 0.3760 | 0.0188 |
| Chicopee | 0.5422 | 0.3505 | 0.0175 |
| Concord | 0.6151 | 0.3976 | 0.0199 |
| Connecticut | 0.7124 | 0.4605 | 0.0230 |
| Deerfield | 0.5512 | 0.3563 | 0.0178 |
| Farmington | 0.4879 | 0.3154 | 0.0158 |
| French | 0.5855 | 0.3785 | 0.0189 |
| Housatonic | 0.5053 | 0.3266 | 0.0163 |
| Hudson | 0.4725 | 0.3054 | 0.0153 |
| Ipswich | 0.5319 | 0.3438 | 0.0172 |
| Merrimack | 0.6450 | 0.4169 | 0.0208 |
| Millers | 0.4773 | 0.3085 | 0.0154 |
| Narragansett | 0.6466 | 0.4179 | 0.0209 |
| Nashua | 0.5765 | 0.3726 | 0.0186 |
| NoCo | 0.4183 | 0.2704 | 0.0135 |
| Parker | 0.5083 | 0.3286 | 0.0164 |
| Quinebaug | 0.5752 | 0.3718 | 0.0186 |
| Shawsheen | 0.5226 | 0.3378 | 0.0169 |
| SoCo 21a | 0.5437 | 0.3514 | 0.0176 |
| Taunton | 0.7132 | 0.4610 | 0.0230 |
| Tenmile | 0.6142 | 0.3970 | 0.0199 |
| Westfield | 0.4568 | 0.2953 | 0.0148 |