

# North Reading's Request to Purchase Water from Andover under the Interbasin Transfer Act

WRC Draft Staff Recommendation

July 9, 2020

# Facts Pertaining to the Application

North Reading is in the Ipswich River basin

6 groundwater wells & 1 tubular wellfield in 4 locations:

- Reduced capacity of existing sources (60% of permitted volume)
- Currently purchasing up to 1.5 MGD from Andover through an existing Interbasin Transfer Act approval (1958 transfer & WRC decision, 1991)
- January 2020: PFAS >20 ppt detected in N. Reading sources (DEP Guideline = 20 ppt)

Proposing to purchase an additional 1.5 MGD (for a total of 3.0 MGD) to replace its existing water supply sources

Andover's sources are in the Merrimack River basin



The Secretary's Certificate on the Final EIR was issued on April 3, 2020, stating that no further MEPA review is needed.



The WRC accepted North Reading's application as complete on April 16, 2020.



Agency comments were received from DEP and DFG.



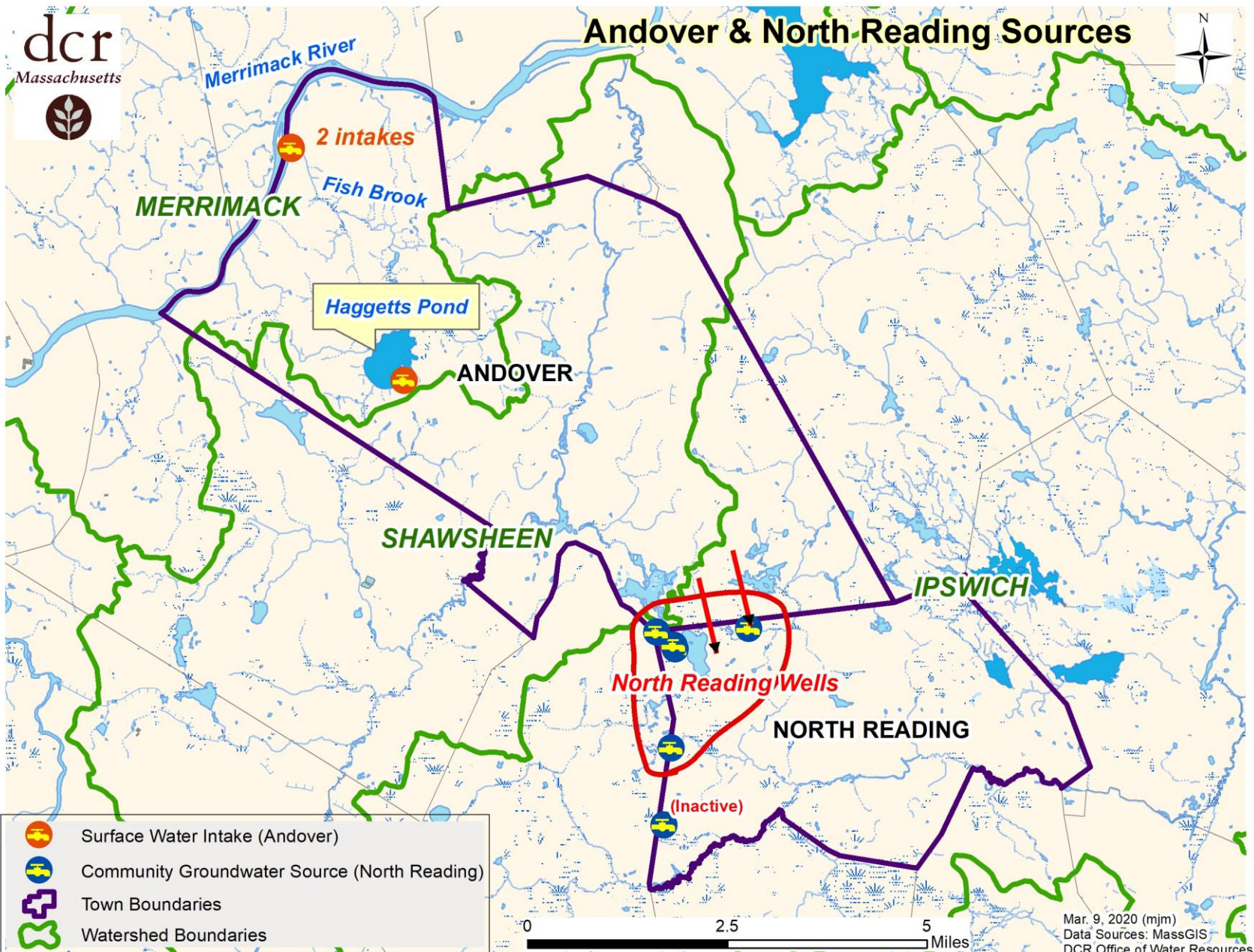
Public hearings were held via Zoom for the donor and receiving basins on May 28 and June 2, 2020.



Public comments were received from the Towns of Andover and North Reading and the Ipswich River Watershed Association.

## More Facts

# Andover & North Reading Sources



- Surface Water Intake (Andover)
- Community Groundwater Source (North Reading)
- Town Boundaries
- Watershed Boundaries

## Criteria of the Act

Criteria	Application Meets?
Criterion #1: MEPA Compliance	Yes
Criterion #2: Viable In-Basin Sources	Yes, with conditions
Criterion #3: Water Conservation	Yes, with conditions
Criterion #4: Forestry Management	Not Applicable
Criterion #5: Reasonable Instream Flow	Yes
Criterion #6: Groundwater/Pumping Test	Not Applicable
Criterion #7: Cumulative Impacts	Yes

## Criterion 2 Viable In- Basin Sources



Ipswich River basin is flow-depleted/stressed



Water quality challenges



Capacity challenges

## Criterion 3 Water Conservation

Meets most of the Performance Standards for Water Conservation including:

- Metering, leak detection, water rates, billing, drought plan

In the process of addressing high UAW via ongoing meter replacement program.

RGPCD range 61-70, avg 68 (2012-18). AMI system investment and water smart software expected to help

## Criterion 5 Reasonable Instream Flow & Criterion 7 Cumulative Impacts

Regulations require consideration of a broad range of environmental information, including:

- Drought and low flows
- Intermediate and flood flows
- Impacts to fisheries, hydropower, rare and endangered species

Criterion 7 evaluates impacts of past, authorized, or proposed transfers on streamflow in the donor basin

Looked at the entire 3 MGD transfer as well as the incremental 1.5 MGD





The Merrimack River is a very large river compared to the proposed transfer (drainage area at Fish Brook is 4,650 square miles)



No impacts to intermediate flows or high flows



No impacts to low flows (looked at: minimum flows in 3 droughts, including 1960's; 95% exceedance flow; 7Q10)



No impacts to other resources listed in the regulations (e.g., fisheries, endangered species, hydropower)



Determined that "reasonable instream flow" remains and there are no adverse impacts to resources

## Criterion 5 Reasonable Instream Flow

# Conditions of the Approval



North Reading must commit in writing to abide by any required conditions. Conditions cover:



DEP ACO requirements



65/10 compliance and monitoring



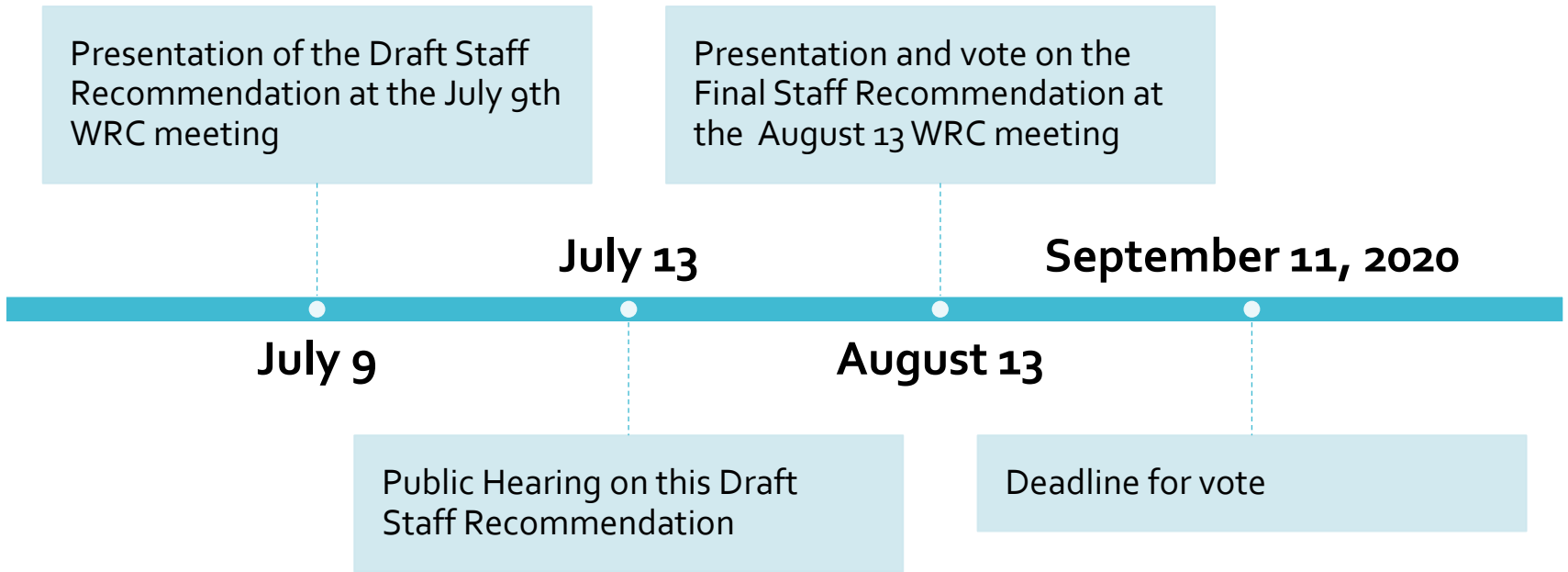
Water Loss Audit and Program



Update drought and water conservation plans



Outdoor water use restrictions



## Next Steps