



# Agricultural Water Withdrawal Approvals

Bill Sheehan  
Regional Director  
MDEP Northern Maine Regional  
Office

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION

*Protecting Maine's Air, Land and Water*

# Permits?

- Access to water resources may require permits from Maine DEP. LUPC (unorganized territories) or the town.
- Are you cutting vegetation?
- Disturbing soil or river or stream bed?
- Are you creating a pond?
- Removing water during droughts and dry periods?

08/04/2017





# Application process for alternative flows or water level

Contact Rob Mohlar, Division of  
Environmental Assessment, MDEP  
[robert.c.mohlar@maine.gov](mailto:robert.c.mohlar@maine.gov)

## FIRST STEP:

For a Chapter 587 Flow Rule Criteria  
Determination for proposed ag water  
withdrawal location



# Criteria Determination

- Provides aquatic base flow estimates for all seasons and potentially available water volumes for a given location.
- Gives allowable volume deminimus volume at which might be withdrawn (20,000 gal/day or 1% of 7Q10 flow)
- Also provides minimum river/stream flows when no water can be removed without dewatering and impacting aquatic resources.





# Maine DEP Chapter 587 Flow Rule Criteria Determination (Aquatic base flow estimates per section 3.A.(2) of Chapter 587)

Date: August 3, 2021

Prepared by: Art McGlauffin, BWQ-DEA

## River/Stream/Brook Information

Resource: Aroostook River  
Town: Ashland  
Classification: B  
Withdrawal point GPS: 46.63252 N 68.41871 W  
Withdrawal location: 150' downstream (north) of Route 11 Bridge

## Gauge Data & Flow Statistics

Town: Washburn  
NWIS #: 1017000  
Gauge GPS: 46.7772 N 68.1572 W  
DA<sub>g</sub> (sq. mi.): 1654  
Record period: 1930-2020 ← must be ≥ 10 yrs.  
Statistics from: USGS & WR08

Month	Median Flow (cfs)	Mean Flow (cfs)
January	1000	1215
February	890	1116
March	1010	1623
April	7295	8796
May	5870	7539
June	1760	2420
July	943	1377
August	573	1071
September	576	1118
October	991	1989
November	1900	2706
December	1380	3070

Flow Statistic	(cfs)
7Q10	135.0
Q annual mean	2751
Q annual median	1270

## Water Use Information

Prepared for: [REDACTED], NRCS  
Water user: [REDACTED]  
Use: Crop irrigation  
Water need/event: 1.9 acre feet  
Water need/season: 15.6 acre feet

## Withdrawal Point Flow Estimates

Town: Ashland  
Intake location: 150' downstream (north) of Route 11 Bridge  
Intake GPS: 46.63252 N 68.41871 W  
DA<sub>w</sub> (sq. mi.): 1338  
DA<sub>w</sub>/DA<sub>g</sub>: 81% ← must be ≥ 50%  
DA<sub>g</sub>/DA<sub>w</sub>: 124% ← must be ≥ 50%

Month	Median Flow (cfs)	Mean Flow (cfs)
January	809	983
February	720	903
March	817	1313
April	5901	7107
May	4749	6099
June	1424	1958
July	763	1114
August	464	866
September	466	904
October	802	1528
November	1537	2189
December	1116	1675

Flow Statistic	(cfs)
7Q10	109.2
Q annual mean	2225
Q annual median	1027

Water potentially available for July 1<sup>st</sup> - Sept 15<sup>th</sup> irrigation season = 30764 acre feet

## Flow Criteria

MDEP has established the following water withdrawal criteria under the Chapter 587 Flow Rule using analyses of the flow record at the above gauge, adjustments due to the drainage area at the above intake's location, and the resource's classification:

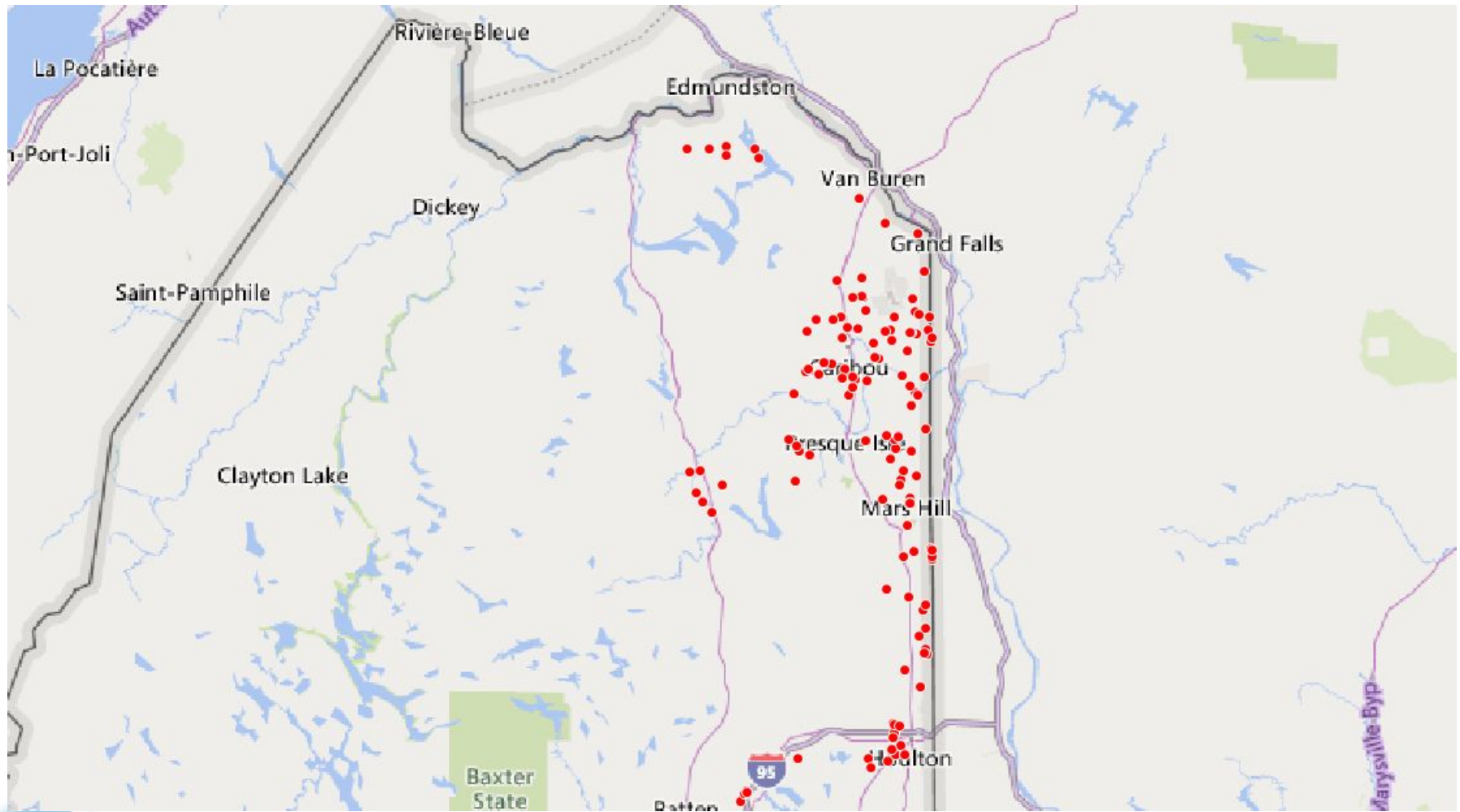
- 1) Do not remove irrigation water from Aroostook River at 150' downstream (north) of Route 11 Bridge when
- |                                 |      |     |   |
|---------------------------------|------|-----|---|
| - flow is equal to or less than | 720  | cfs | between January 1 and March 15,           |
| - flow is equal to or less than | 5901 | cfs | between March 16 and May 15,              |
| - flow is equal to or less than | 1424 | cfs | between May 16 and June 30,               |
| - flow is equal to or less than | 464  | cfs | between July 1 and September 15,          |
| - flow is equal to or less than | 802  | cfs | between September 16 and November 15, and |
| - flow is equal to or less than | 1116 | cfs | between November 16 and December 31;      |

- 2) Chapter 587 allows 20,000 gallons or 1% of the 7Q10 flow volume, whichever is greater, to be withdrawn from the resource each day at any time provided the water withdrawal does not "dewater" any portion of the resource or cause any other water quality standard to be impaired.

1% of the 7Q10 volume for Aroostook River = 705,828 gallons per day

Therefore, up to 705,828 gallons per day may be withdrawn from Aroostook River at this intake location if no dewatering or other impairment to the resource occurs due to this water withdrawal.

# DEP-reviewed water withdrawal locations in NMR



# Application process

- Form available on DEP website “Request for Alternative Water Flow or Alternative Water Level Determination”.
- Need to provide location, irrigation plan including duration, volume etc, BMP’s, proposed minimum flows/water levels and a monitoring plan that assures required maintenance of minimum downstream flows or lake levels.





# Access permitting





# Natural Resource Protection Act and Shoreland Zoning

- ACCESS: Most clearing of vegetation and shoreland soil disturbance on a stream or river bank and near lakes and ponds will need a permit from DEP and possibly the town.
- Instream and many off stream storage ponds will likely need a permit from Army Corps of Engineers and MDEP.
- Scott Belair MDEP 760-3145 for guidance





# QUESTIONS?

08/14/2020



MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION

[www.maine.gov/dep](http://www.maine.gov/dep)



Contact:

Bill Sheehan  
[bill.j.sheehan@maine.gov](mailto:bill.j.sheehan@maine.gov)

[\*www.maine.gov/dep\*](http://www.maine.gov/dep)

