

Pemigewasset Annual Water Use versus Stream Flow – Calendar Year 2004

Water use was reported by fifty sources, two transfers and twenty returns in the Pemigewasset Water Management Planning Area. Seven sources used by five facilities were not included in this assessment because they did not meet the definition of an Affected Water User under the rules, which require the user to have a source or withdrawal within 500 feet of a tributary to the Designated River. These sources include two agricultural ponds used for irrigation, two surface water withdrawals for industrial use (timber), a community surface water supply, and two snowmaking withdrawals from surface water. The unassessed water use from the four sources represents between 0.0 and 13.6 % of the monthly water use included in the assessment.

| Unassessed Water User Facility (All Source and Discharge > 500 feet from perennial stream) | Unassessed Annual Water Use (gallons) |
|--|---------------------------------------|
| WAUKEWAN GOLF CLUB | 4,808,000 |
| NEW HAMPTON VIL PREC | 13,160,000 |
| TENNEY MOUNTIAN SKI LLC | 52,400,000 |
| RAGGED MOUNTAIN SKI AREA | 57,090,000 |
| CERSOSIMO LUMBER CO INC | 56,664,000 |

The Water Management Planning Area includes registered water use by eight hydroelectric facilities. Two are on the Designated River. Water use by hydroelectric facilities are not shown in the monthly graphs because flow in is expected to equal flow out and because the General Standard does not apply to hydroelectric facilities between their point of withdrawal and point of return per Env-Ws 1903.02(d). Other reporting water users include nine water works systems and six waste water facilities. Two registered water users are for snowmaking. Irrigation uses include four for golf courses and one for playing field irrigation and one agricultural use. There are six industrial facilities registered including gravel, lumber and concrete facilities, a mill and two biomass power plants. There are two registered aquaculture facilities, which are the state fish hatcheries in New Hampton and Warren.

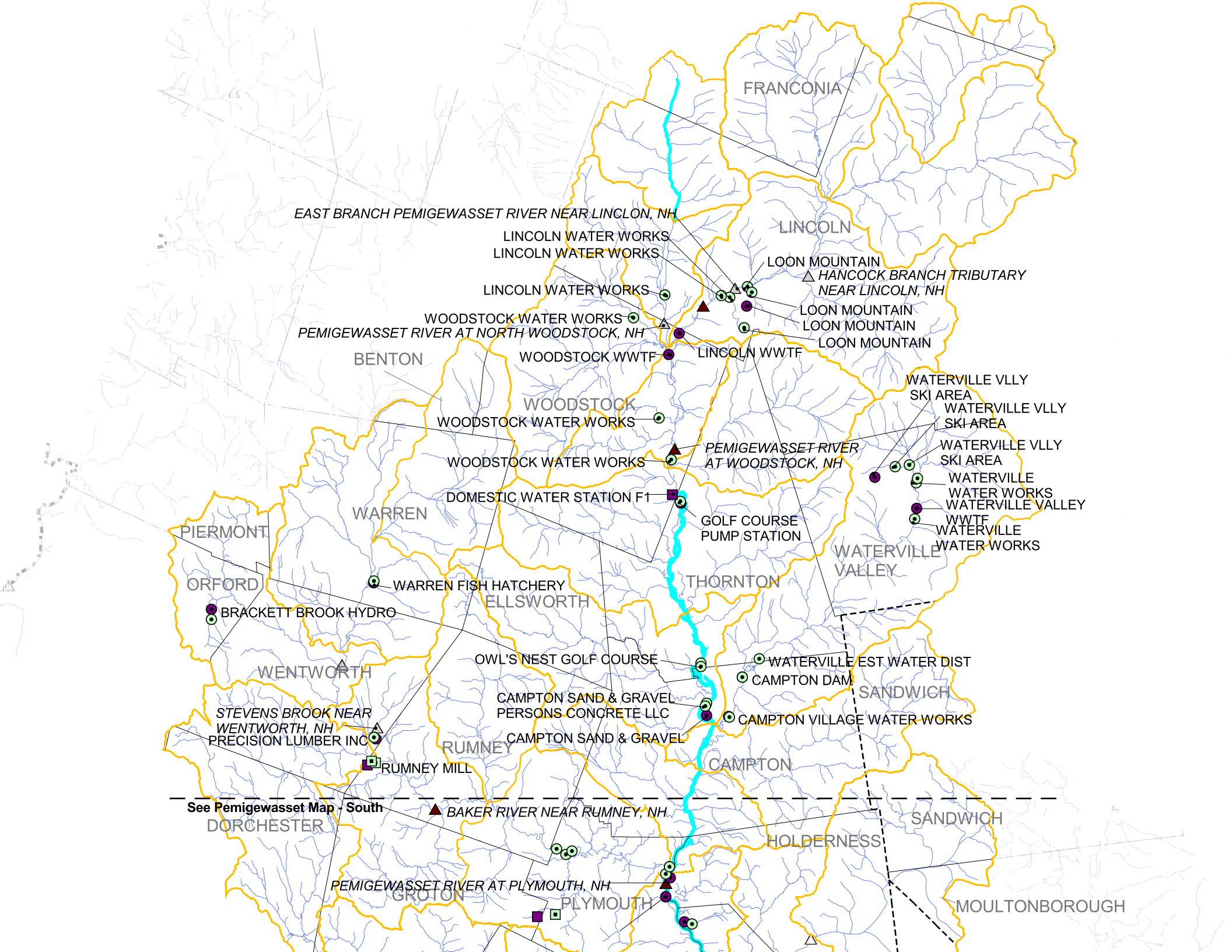
The Pemigewasset Designated River is in two segments divided by an 11-mile stretch through Lincoln and Woodstock. The first segment begins at the outlet of Profile Lake in Franconia and extends more than 5 miles to the southern boundary of Franconia Notch State Park in Lincoln. It has a watershed area of 19.1 square miles at its lowest end. There is no registered water use in this portion of the watershed. The second segment begins at the Holderness-Ashland town line and extends 50 miles to its confluence with the Winnepesaukee River. This confluence is the beginning of the Upper Merrimack Designated River. The results of this assessment are a component of that river's assessment.

The Pemigewasset Water Management Planning Area (WMPA) covers 1023 square miles and includes two stream flow gages that were used in this assessment—USGS 01075000 PEMIGEWASSET RIVER AT WOODSTOCK, NH and USGS 01076500 PEMIGEWASSET RIVER AT PLYMOUTH, NH. The Woodstock gage measures 193 square miles of the WMPA; the Plymouth, 622 square miles. The Pemigewasset River ends and the

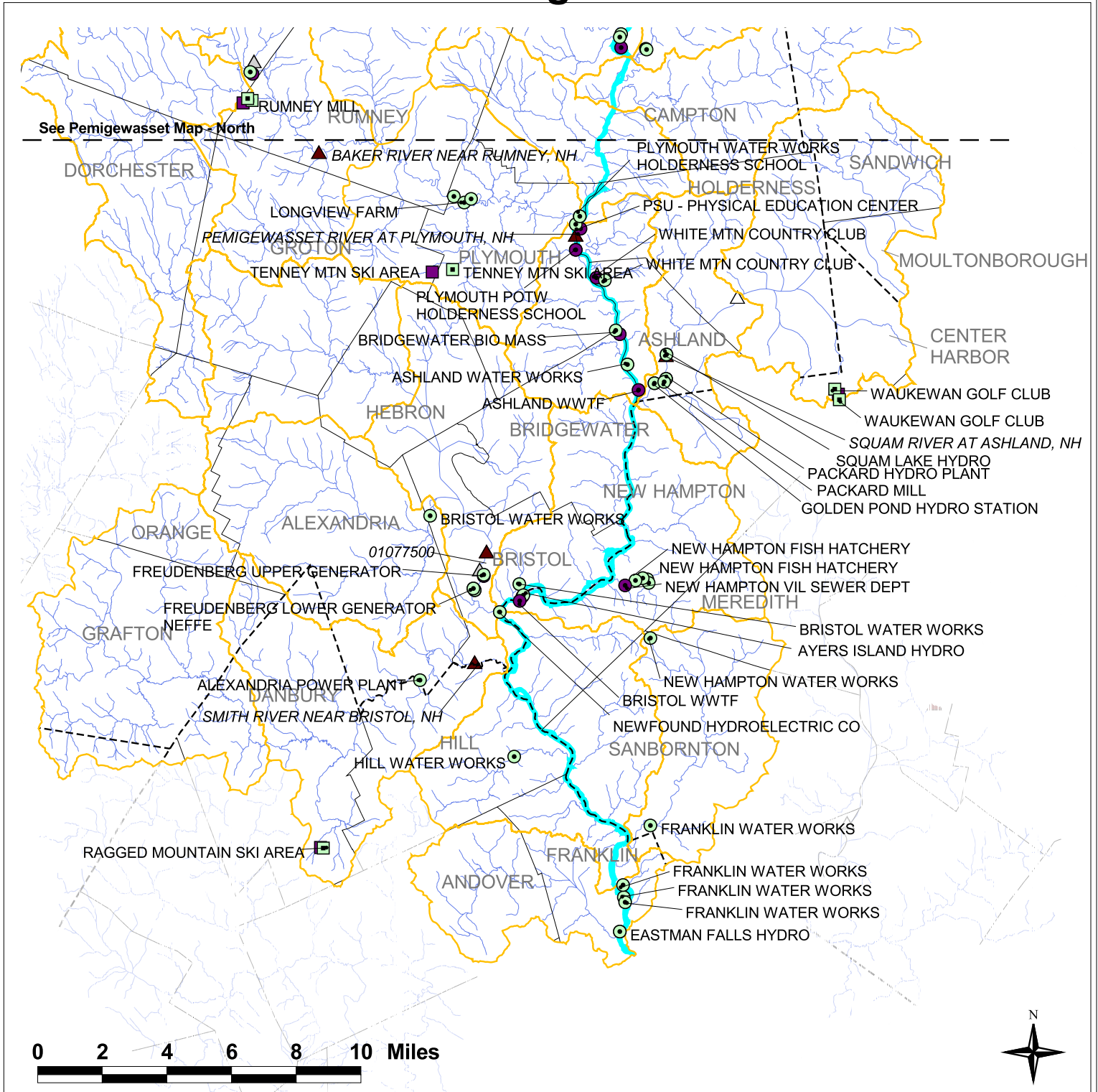
Merrimack River begins at the confluence of the Winnepesaukee and Pemigewasset Rivers in Franklin. Stream flow between the Plymouth gage and the end of the Designated River was calculated with information from the gage on the Winnepesaukee River in Tilton and the gage on the Merrimack River in Franklin. For this report the stream flow was transposed areally from these gages to all impact points on the Designated River. The 2004 assessment resulted in no months not in compliance with the General Standard.

| Pemigewasset Designated River | River Miles not in Compliance with General Standard (0 at the mouth) | Length of River Miles not in Compliance with General Standard | Maximum value of Aggregate WU /Stream flow | 2003 Months not in Compliance with the General Standard | Unassessed Water Use outside 500' as a percent of the total Water Use |
|-------------------------------|--|---|--|---|---|
| January | -- | -- | 1.0% | -- | 13.6% |
| February | -- | -- | 0.77% | -- | 2.0% |
| March | -- | -- | 0.14% | -- | 0.35% |
| April | -- | -- | 0.04% | -- | 0.52% |
| May | -- | -- | 0.08% | -- | 7.2% |
| June | -- | -- | 0.40% | -- | 7.8% |
| July | -- | -- | 0.47% | -- | 8.4% |
| August | -- | -- | 0.44% | -- | 7.7% |
| September | -- | -- | 0.30% | -- | 4.4% |
| October | -- | -- | 0.56% | -- | 0.53% |
| November | -- | -- | 0.22% | -- | 8.1% |
| December | -- | -- | 0.58% | -- | 15% |

The Pemigewasset Designated River drains directly into the Upper Merrimack Designated River. The results of this assessment are a component of that river's assessment.



Pemigewasset River Affected Water User Facilities: Source and Discharge Locations - South



- | | | |
|--|------------------------|------------------|
| Affected Water Users Source | Stream Gages Active | Designated Reach |
| Discharge | Inactive | Hydrology |
| Water Users (outside 500 ft of hydrology) Source | Unknown | State boundary |
| Discharge | WMPA | Town boundary |

The coverages presented are under constant revision as new sites or facilities are added. They may not contain all of the potential or existing sites or facilities. NHDDES is not responsible for the use or interpretation of this information. Not intended for legal purposes. Water users database last updated May 2005.

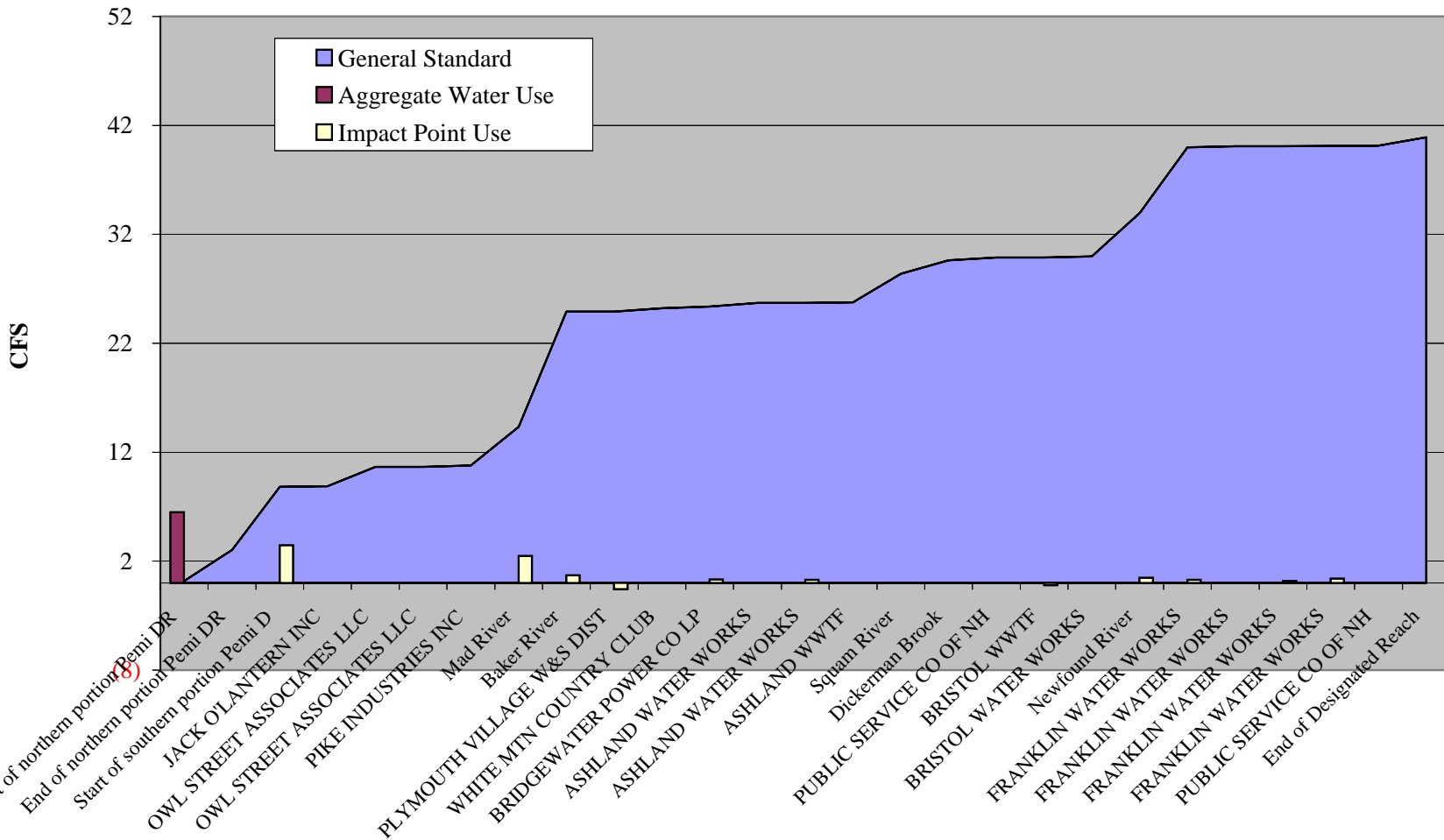
Map produced December 14, 2005

| | | | | | | | | | | | | | | | |
|----------------------------------|---|-----------------|--------|-----|------|------|------|------|------|------|------|------|------|------|-----|
| End of northern portion Pemi DR | National Forest Boundary | | 19.1 | 3.0 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 3.0 |
| Start of southern portion Pemi D | Woodstock/Thornton TL/E. Branch Pemi confl. | | 220.9 | 8.8 | 4.4 | 8.8 | 35.3 | 35.3 | 8.8 | 8.8 | 8.8 | 8.8 | 4.4 | 8.8 | 8.8 |
| JACK O'LANTERN INC | GOLF COURSE PUMP STATION | 20234 20234-S01 | 222.1 | 8.9 | 4.4 | 8.9 | 36 | 36 | 8.9 | 8.9 | 8.9 | 8.9 | 4.4 | 8.9 | 8.9 |
| OWL STREET ASSOCIATES LLC | OWL'S NEST GOLF COURSE | 20635 20635-S01 | 266.4 | 11 | 5.3 | 11 | 43 | 43 | 11 | 11 | 11 | 11 | 5.3 | 11 | 11 |
| OWL STREET ASSOCIATES LLC | OWL'S NEST GOLF COURSE | 20635 20635-S02 | 266.4 | 11 | 5.3 | 11 | 43 | 43 | 11 | 11 | 11 | 11 | 5.3 | 11 | 11 |
| PIKE INDUSTRIES INC | CAMPTON SAND & GRAVEL | 20192 20192-S01 | 269.6 | 11 | 5.4 | 11 | 43 | 43 | 11 | 11 | 11 | 11 | 5.4 | 11 | 11 |
| Mad River | | | 358.1 | 14 | 7.2 | 14 | 57 | 57 | 14 | 14 | 14 | 14 | 7.2 | 14 | 57 |
| Baker River | | | 622.4 | 25 | 12 | 25 | 100 | 25 | 25 | 12 | 25 | 25 | 12 | 25 | 100 |
| PLYMOUTH VILLAGE W&S DIST | POTW | 20095 20095-D01 | 622.9 | 25 | 12 | 25 | 100 | 25 | 25 | 12 | 25 | 25 | 12 | 25 | 100 |
| WHITE MTN COUNTRY CLUB | | 20306 20306-S01 | 630.2 | 25 | 13 | 25 | 101 | 25 | 25 | 13 | 25 | 25 | 13 | 25 | 101 |
| BRIDGEWATER POWER CO LP | BRIDGEWATER BIO MASS | 20516 20516-S01 | 634.6 | 25 | 13 | 25 | 102 | 25 | 25 | 13 | 25 | 25 | 13 | 25 | 102 |
| ASHLAND WATER WORKS | ASHLAND WATER WORKS | 20041 20041-S03 | 642.9 | 26 | 13 | 26 | 103 | 26 | 26 | 13 | 26 | 26 | 13 | 26 | 103 |
| ASHLAND WATER WORKS | ASHLAND WATER WORKS | 20041 20041-S02 | 642.9 | 26 | 13 | 26 | 103 | 26 | 26 | 13 | 26 | 26 | 13 | 26 | 103 |
| ASHLAND WWTF | WASTE WATER TREAT PLANT | 20083 20083-D01 | 644.1 | 26 | 13 | 26 | 103 | 26 | 26 | 13 | 26 | 26 | 13 | 26 | 103 |
| Squam River | | | 709.5 | 28 | 14 | 28 | 114 | 28 | 28 | 14 | 28 | 28 | 14 | 28 | 114 |
| Dickerman Brook | | | 740.3 | 30 | 15 | 30 | 118 | 30 | 30 | 15 | 30 | 30 | 15 | 30 | 118 |
| PUBLIC SERVICE CO OF NH | AYERS ISLAND HYDRO | 20144 20144-S01 | 746.8 | | | | | | | | | | | | |
| PUBLIC SERVICE CO OF NH | AYERS ISLAND HYDRO | 20144 20144-D01 | 746.8 | 30 | 15 | 30 | 119 | 30 | 30 | 15 | 30 | 30 | 15 | 30 | 119 |
| BRISTOL WWTF | WASTE WATER TREAT PLANT | 20286 20286-D01 | 747.0 | 30 | 15 | 30 | 120 | 30 | 30 | 15 | 30 | 30 | 15 | 30 | 120 |
| BRISTOL WATER WORKS | WATER WORKS | 20044 20044-S02 | 749.6 | 30 | 15 | 30 | 120 | 30 | 30 | 15 | 30 | 30 | 15 | 30 | 120 |
| Newfound River | | | 848.8 | 34 | 17 | 34 | 136 | 34 | 34 | 17 | 34 | 34 | 17 | 34 | 136 |
| FRANKLIN WATER WORKS | FRANKLIN WATER WORKS | 20357 20357-S01 | 999.3 | 40 | 20 | 40 | 160 | 40 | 40 | 20 | 40 | 40 | 20 | 40 | 160 |
| FRANKLIN WATER WORKS | FRANKLIN WATER WORKS | 20357 20357-S04 | 1002.0 | 40 | 20 | 40 | 160 | 40 | 40 | 20 | 40 | 40 | 20 | 40 | 160 |
| FRANKLIN WATER WORKS | FRANKLIN WATER WORKS | 20357 20357-S02 | 1002.0 | 40 | 20 | 40 | 160 | 40 | 40 | 20 | 40 | 40 | 20 | 40 | 160 |
| FRANKLIN WATER WORKS | FRANKLIN WATER WORKS | 20357 20357-S03 | 1002.6 | 40 | 20 | 40 | 160 | 40 | 40 | 20 | 40 | 40 | 20 | 40 | 160 |
| PUBLIC SERVICE CO OF NH | EASTMAN FALLS HYDRO | 20145 20145-S01 | 1003.5 | | | | | | | | | | | | |
| PUBLIC SERVICE CO OF NH | EASTMAN FALLS HYDRO | 20145 20145-D01 | 1003.5 | 40 | 20 | 40 | 161 | 40 | 40 | 20 | 40 | 40 | 20 | 40 | 161 |
| End of Designated Reach | | | 1022.6 | 41 | 20 | 41 | 164 | 41 | 41 | 20 | 41 | 41 | 20 | 41 | 164 |

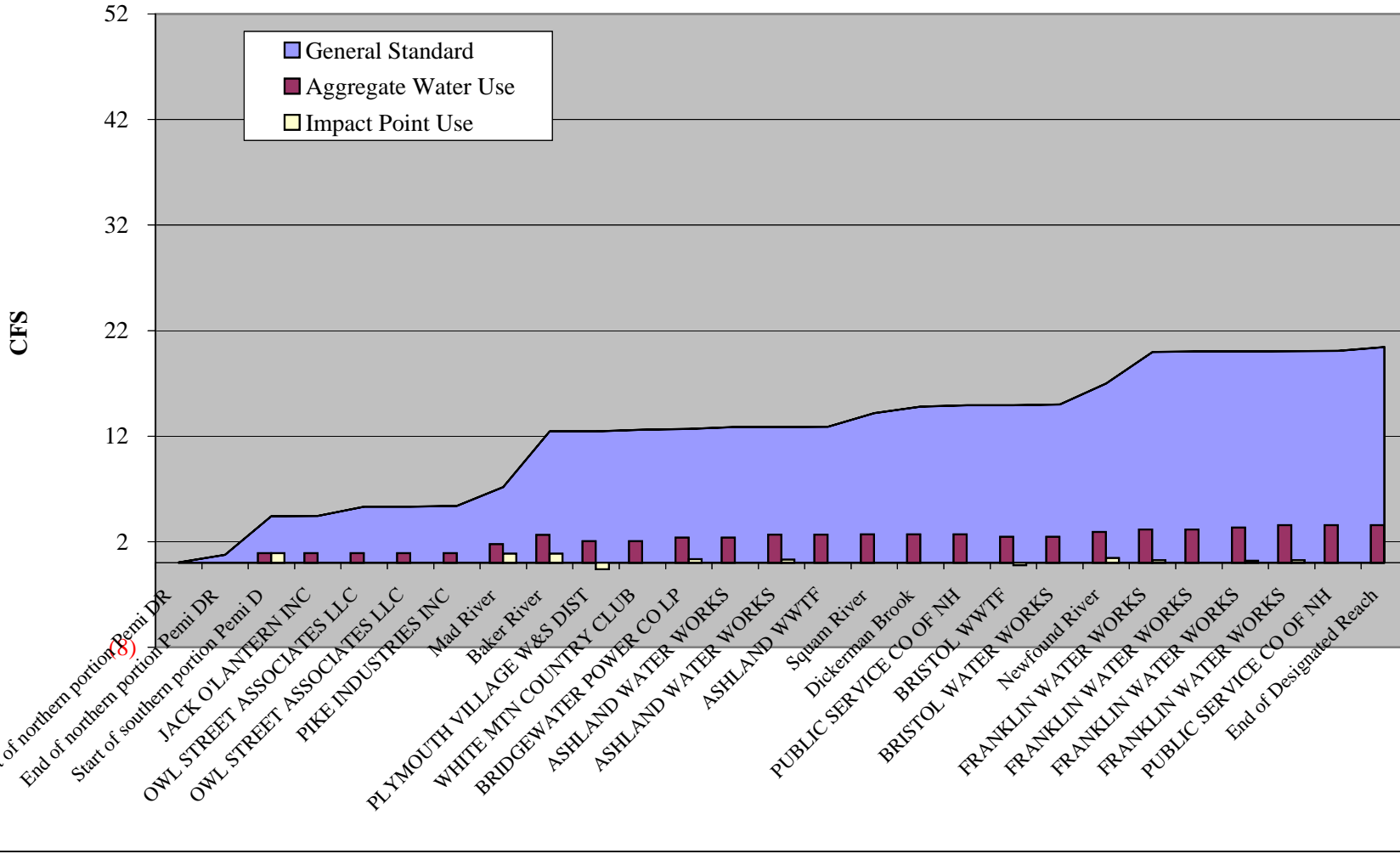
2004 Pemigewasset Estimated Monthly Margin of the Aggregate Water Use Below the General Standard in CFS

| USERNAME | FACILITY | WUSD_ID | DA on DR (SQ MILE) | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|-----------------------------------|---|-----------------|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Start of northern portion Pemi DR | In Franconia Notch Park, near profil | | 1.2 | 0.19 | 0.05 | 0.05 | 0.02 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.19 |
| End of northern portion Pemi DR | National Forest Boundary | | 19.1 | 3.0 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 3.0 |
| Start of southern portion Pemi D | Woodstock/Thornton TL/E. Branch Pemi confl. | | 220.9 | 5.4 | 3.5 | 8.5 | 35 | 35 | 8.4 | 8.2 | 8.1 | 8.2 | 3.9 | 7.6 | 3.9 |
| JACK O'LANTERN INC | GOLF COURSE PUMP STATION | 20234 20234-S01 | 222.1 | 5.4 | 3.5 | 8.5 | 36 | 35 | 8.2 | 8.2 | 8.2 | 8.2 | 3.9 | 7.6 | 3.9 |
| OWL STREET ASSOCIATES LLC | OWL'S NEST GOLF COURSE | 20635 20635-S01 | 266.4 | 7.2 | 4.4 | 10 | 43 | 42 | 10 | 10 | 10 | 10 | 4.8 | 9.4 | 5.7 |
| OWL STREET ASSOCIATES LLC | OWL'S NEST GOLF COURSE | 20635 20635-S02 | 266.4 | 7.2 | 4.4 | 10 | 42 | 42 | 10 | 10 | 10 | 10 | 4.6 | 9.4 | 5.7 |
| PIKE INDUSTRIES INC | CAMPTON SAND & GRAVEL | 20192 20192-S01 | 269.6 | 7.3 | 4.5 | 10 | 43 | 42 | 9.3 | 9.3 | 9.2 | 9.3 | 4.2 | 9.4 | 5.8 |
| Mad River | | | 358.1 | 8.4 | 5.4 | 14 | 57 | 56 | 13 | 13 | 13 | 13 | 5.8 | 12 | 50 |
| Baker River | | | 622.4 | 18 | 10 | 24 | 98 | 23 | 22 | 10 | 22 | 22 | 10 | 22 | 92 |
| PLYMOUTH VILLAGE W&S DIST | POTW | 20095 20095-D01 | 622.9 | 19 | 10 | 24 | 100 | 24 | 23 | 11 | 23 | 23 | 11 | 23 | 93 |
| WHITE MTN COUNTRY CLUB | | 20306 20306-S01 | 630.2 | 19 | 11 | 25 | 101 | 24 | 23 | 11 | 23 | 23 | 11 | 23 | 94 |
| BRIDGEWATER POWER CO LP | BRIDGEWATER BIO MASS | 20516 20516-S01 | 634.6 | 19 | 10 | 24 | 101 | 24 | 23 | 10 | 23 | 23 | 11 | 23 | 94 |
| ASHLAND WATER WORKS | ASHLAND WATER WORKS | 20041 20041-S03 | 642.9 | 19 | 10 | 25 | 102 | 24 | 23 | 10 | 23 | 23 | 11 | 23 | 95 |
| ASHLAND WATER WORKS | ASHLAND WATER WORKS | 20041 20041-S02 | 642.9 | 19 | 10 | 25 | 102 | 24 | 23 | 10 | 23 | 23 | 11 | 23 | 95 |
| ASHLAND WWTF | WASTE WATER TREAT PLANT | 20083 20083-D01 | 644.1 | 19 | 10 | 25 | 102 | 24 | 23 | 10 | 23 | 23 | 11 | 23 | 95 |
| Squam River | | | 709.5 | 22 | 12 | 27 | 113 | 27 | 26 | 11 | 25 | 26 | 12 | 25 | 106 |
| Dickerman Brook | | | 740.3 | 23 | 12 | 28 | 118 | 28 | 27 | 12 | 27 | 27 | 13 | 27 | 111 |
| PUBLIC SERVICE CO OF NH | AYERS ISLAND HYDRO | 20144 20144-S01 | 746.8 | | | | | | | | | | | | |
| PUBLIC SERVICE CO OF NH | AYERS ISLAND HYDRO | 20144 20144-D01 | 746.8 | 23 | 12 | 29 | 119 | 28 | 27 | 12 | 27 | 27 | 13 | 27 | 112 |
| BRISTOL WWTF | WASTE WATER TREAT PLANT | 20286 20286-D01 | 747.0 | 23 | 12 | 29 | 119 | 29 | 28 | 13 | 27 | 27 | 13 | 27 | 112 |
| BRISTOL WATER WORKS | WATER WORKS | 20044 20044-S02 | 749.6 | 24 | 13 | 29 | 120 | 29 | 28 | 13 | 27 | 27 | 13 | 27 | 112 |
| Newfound River | | | 848.8 | 27 | 14 | 33 | 135 | 32 | 31 | 14 | 31 | 31 | 14 | 31 | 135 |
| FRANKLIN WATER WORKS | FRANKLIN WATER WORKS | 20357 20357-S01 | 999.3 | 33 | 17 | 38 | 159 | 38 | 37 | 17 | 37 | 37 | 17 | 37 | 159 |
| FRANKLIN WATER WORKS | FRANKLIN WATER WORKS | 20357 20357-S04 | 1002.0 | 33 | 17 | 39 | 159 | 38 | 37 | 17 | 37 | 37 | 17 | 37 | 159 |
| FRANKLIN WATER WORKS | FRANKLIN WATER WORKS | 20357 20357-S02 | 1002.0 | 33 | 17 | 38 | 159 | 38 | 37 | 16 | 37 | 37 | 17 | 36 | 159 |
| FRANKLIN WATER WORKS | FRANKLIN WATER WORKS | 20357 20357-S03 | 1002.6 | 32 | 16 | 38 | 159 | 38 | 37 | 16 | 36 | 36 | 17 | 36 | 159 |
| PUBLIC SERVICE CO OF NH | EASTMAN FALLS HYDRO | 20145 20145-S01 | 1003.5 | | | | | | | | | | | | |
| PUBLIC SERVICE CO OF NH | EASTMAN FALLS HYDRO | 20145 20145-D01 | 1003.5 | 32 | 16 | 38 | 159 | 38 | 37 | 16 | 36 | 36 | 17 | 36 | 159 |
| End of Designated Reach | | | 1022.6 | 33 | 17 | 39 | 162 | 39 | 37 | 17 | 37 | 37 | 17 | 37 | 162 |

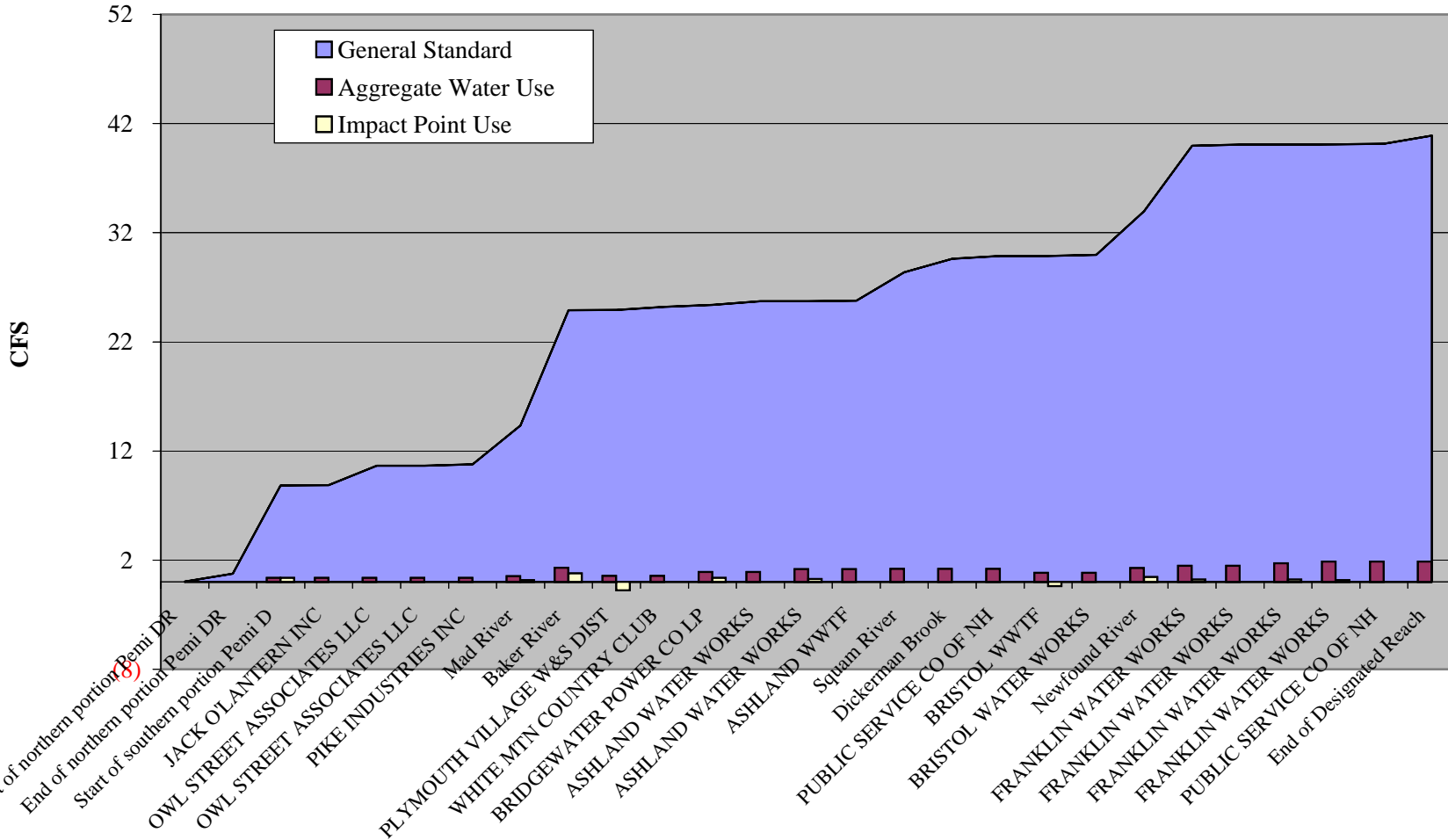
January 2004 Pemigewasset



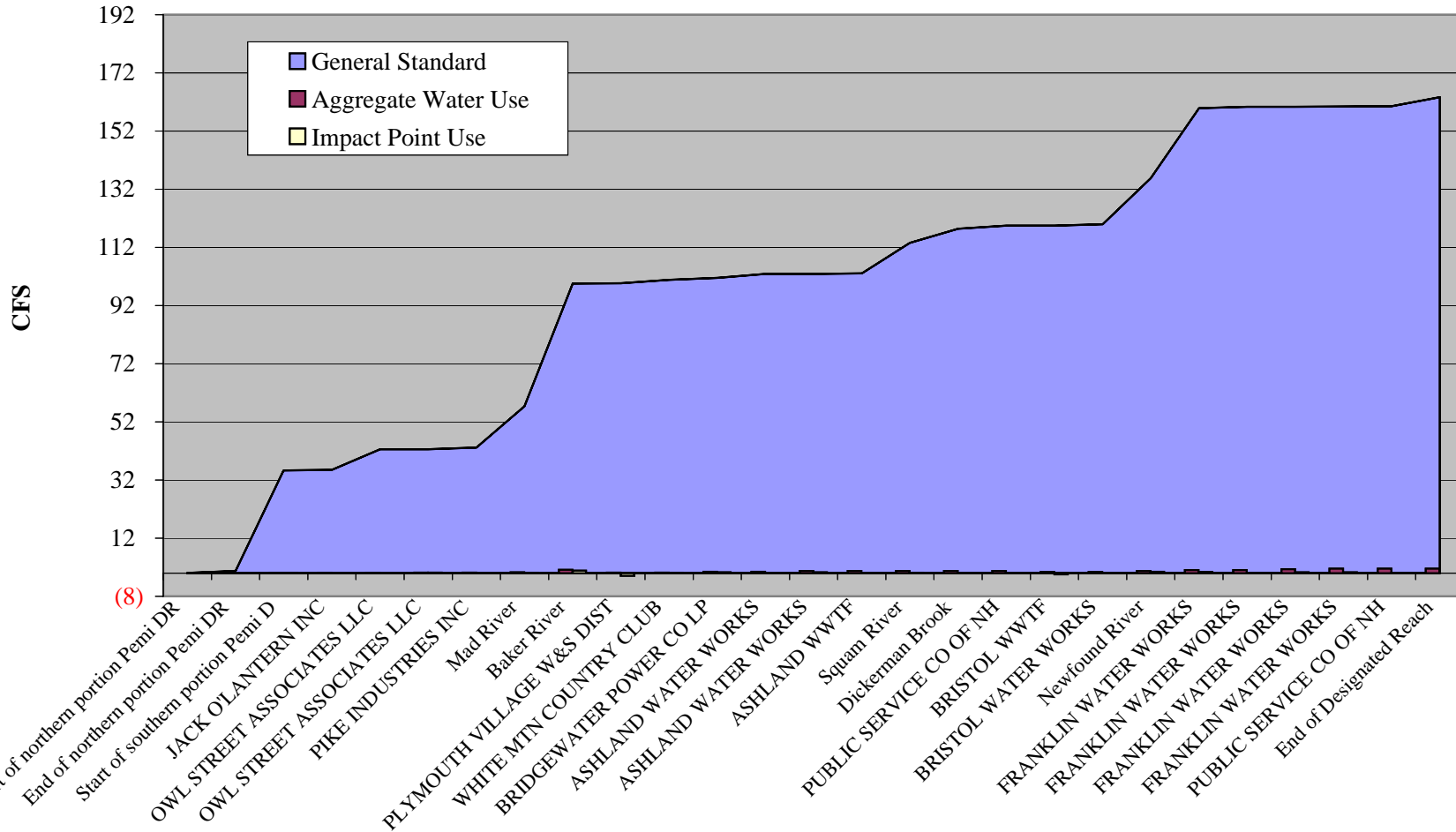
February 2004 Pemigewasset



March 2004 Pemigewasset

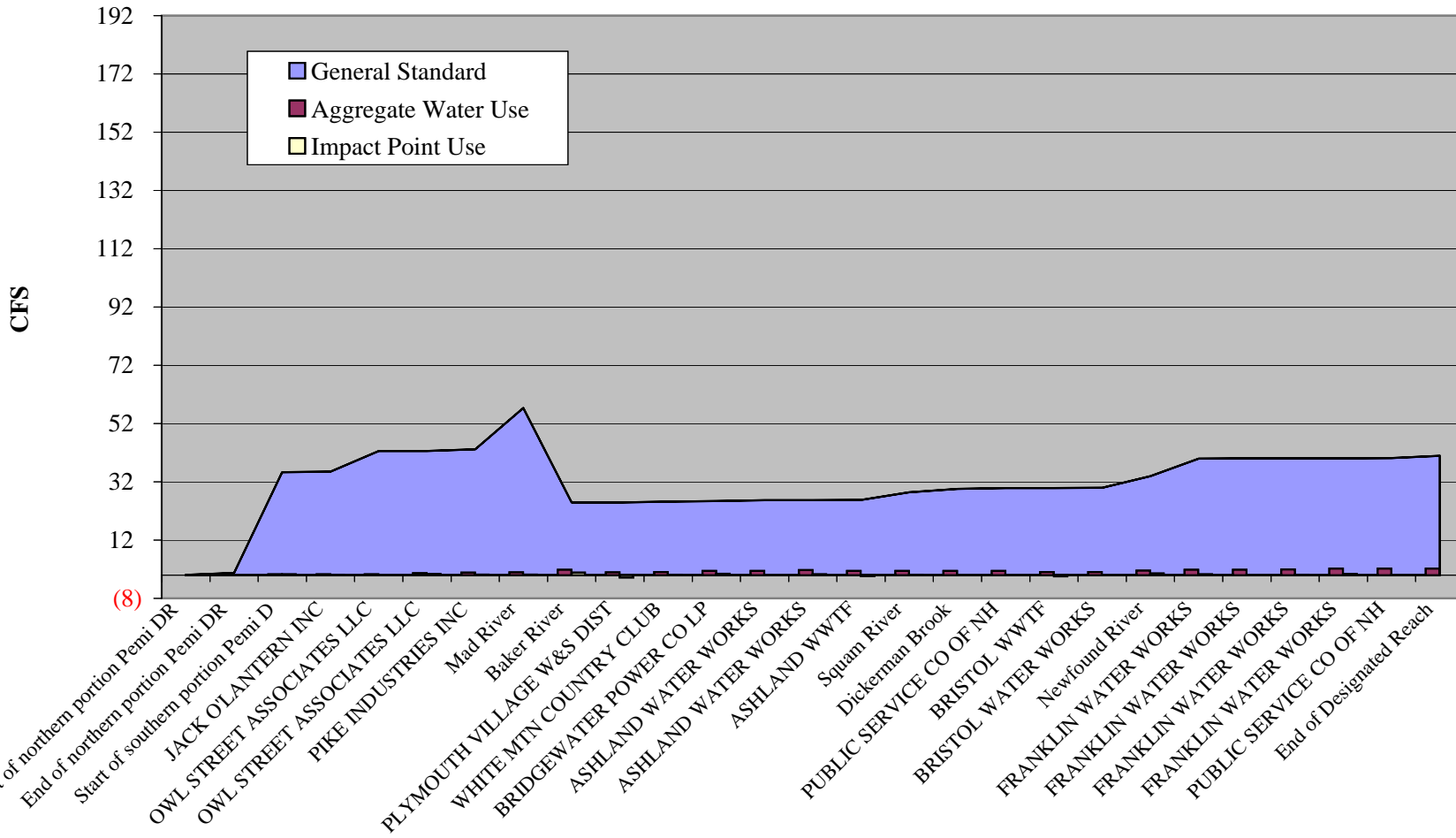


April 2004 Pemigewasset



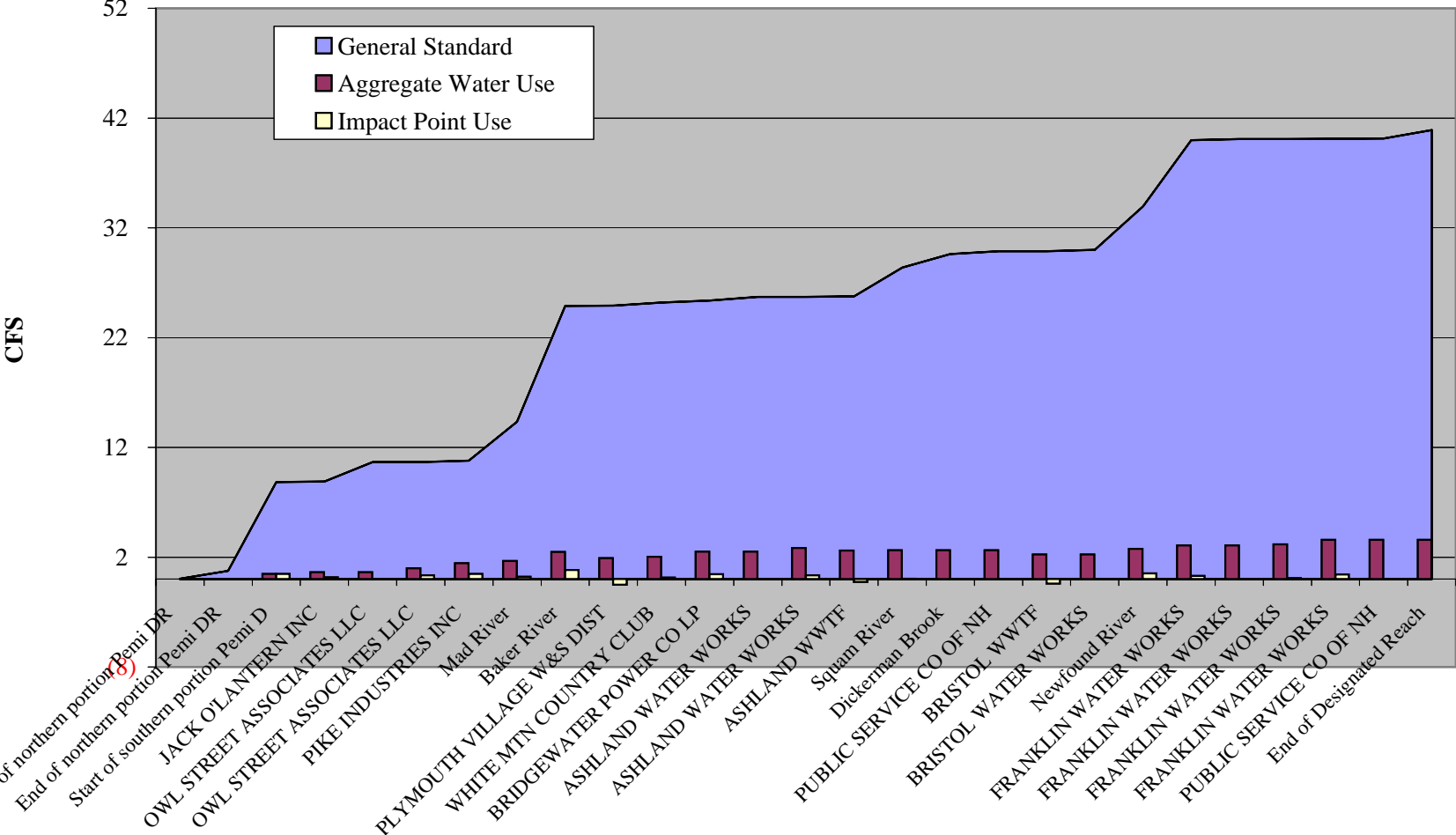
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May 2004 Pemigewasset

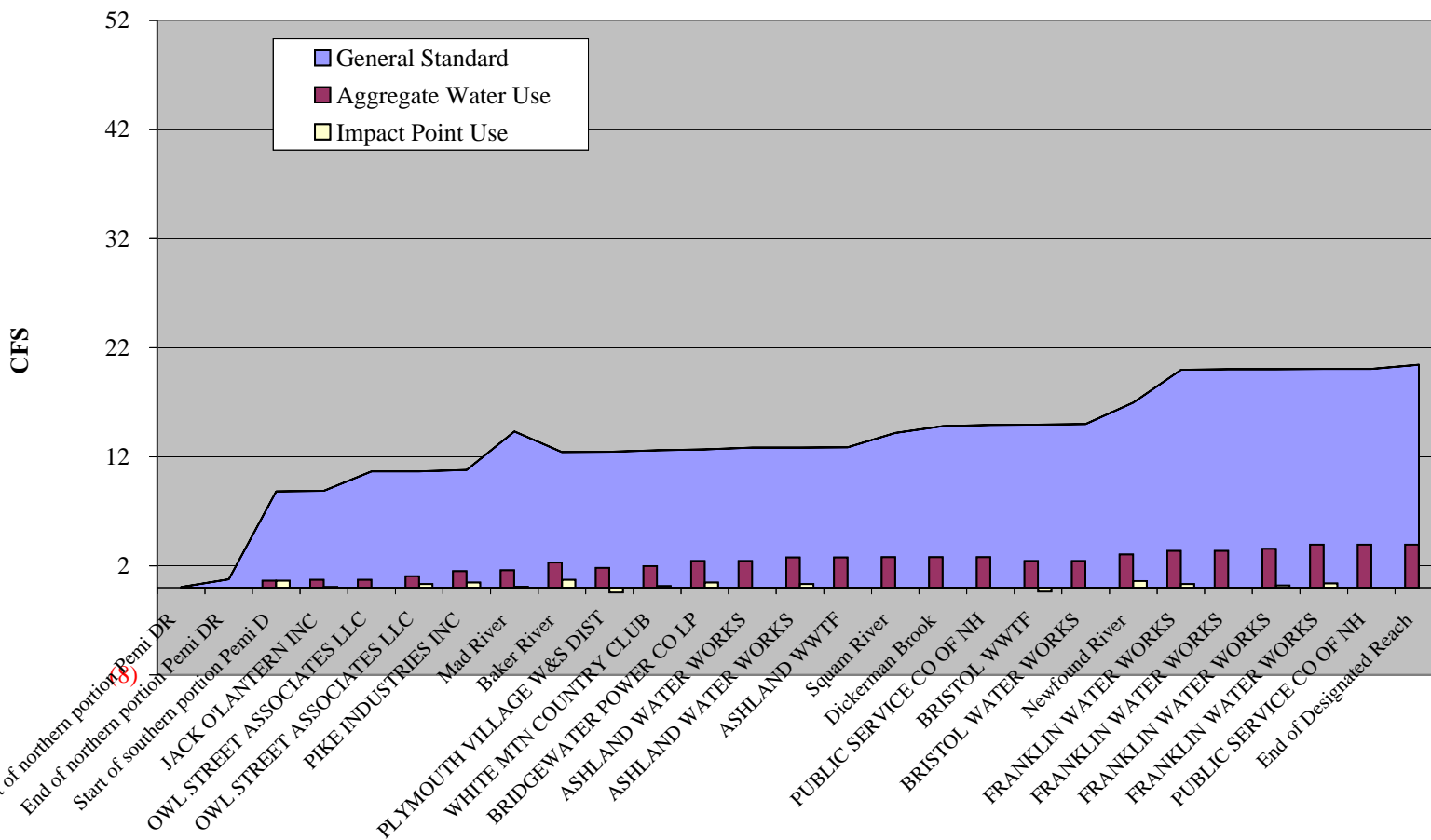


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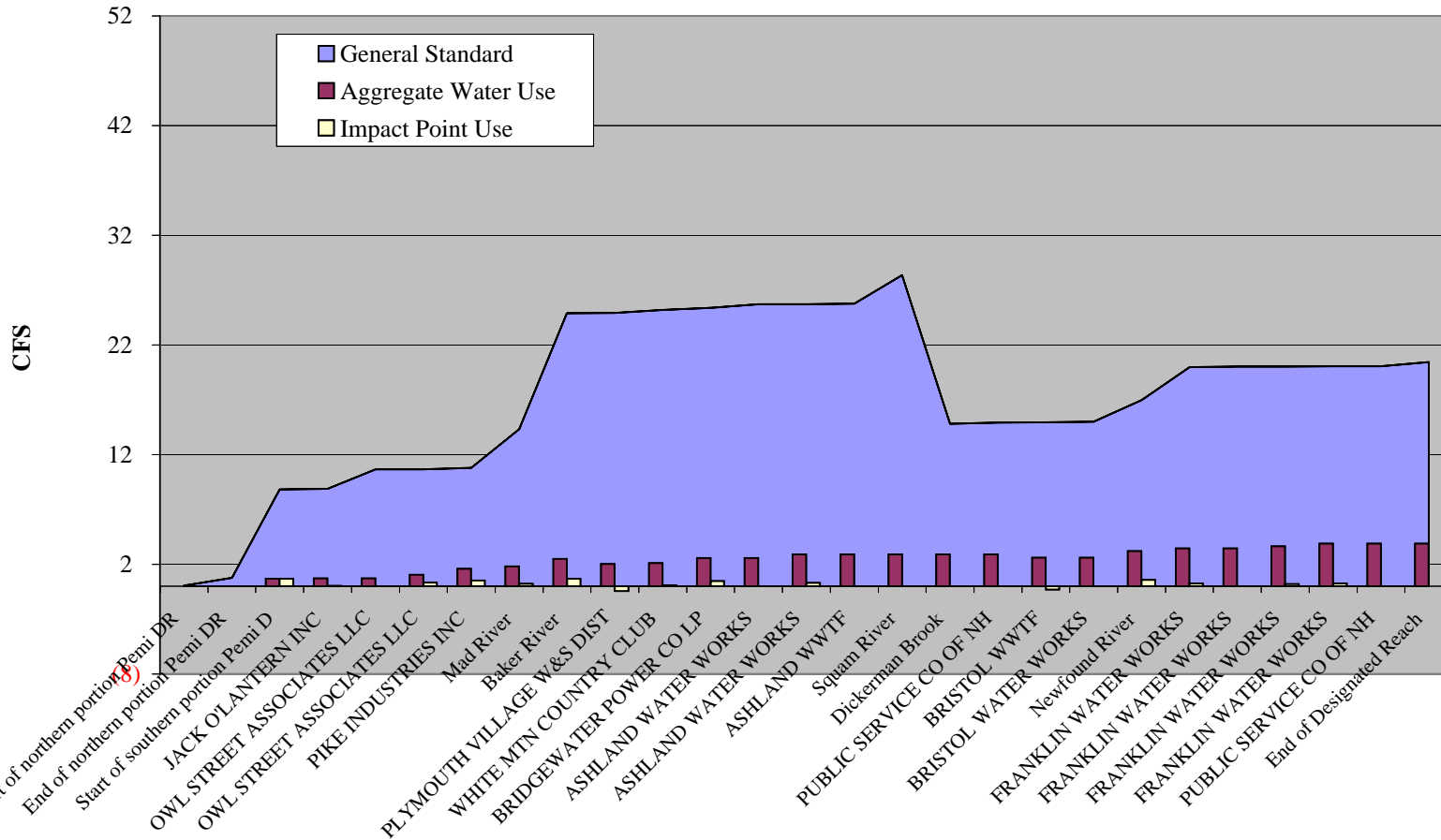
June 2004 Pemigewasset



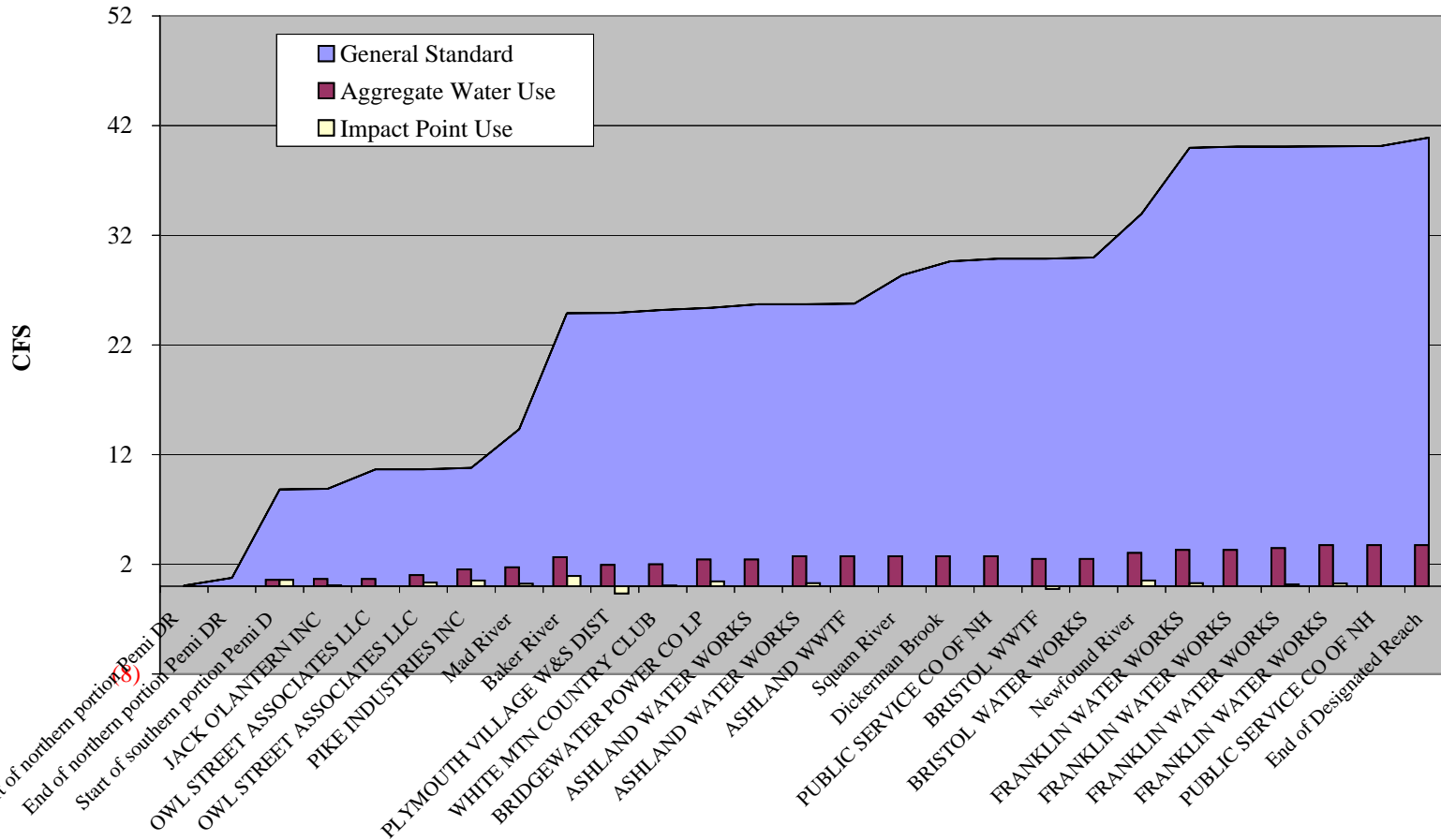
July 2004 Pemigewasset



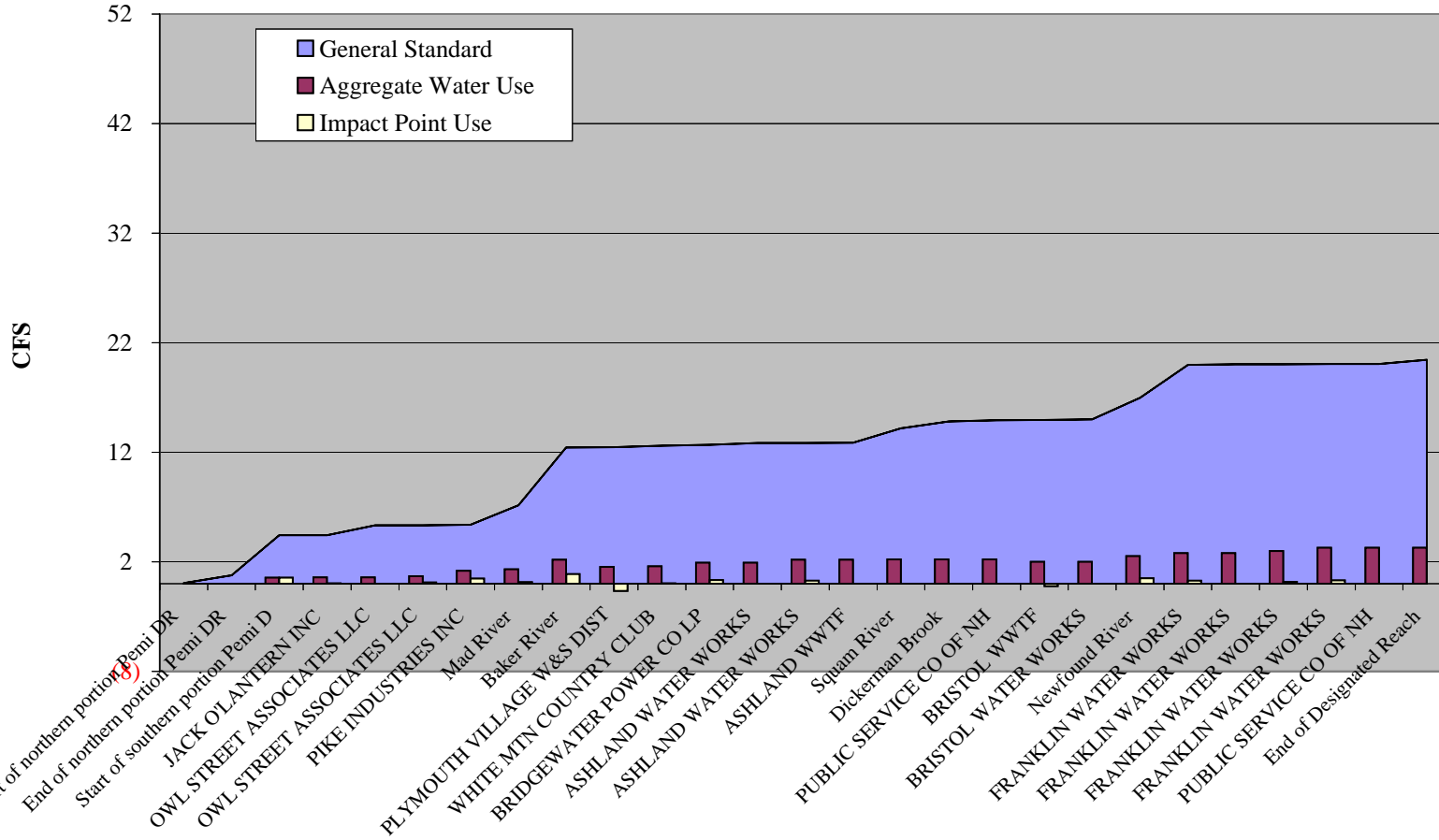
August 2004 Pemigewasset



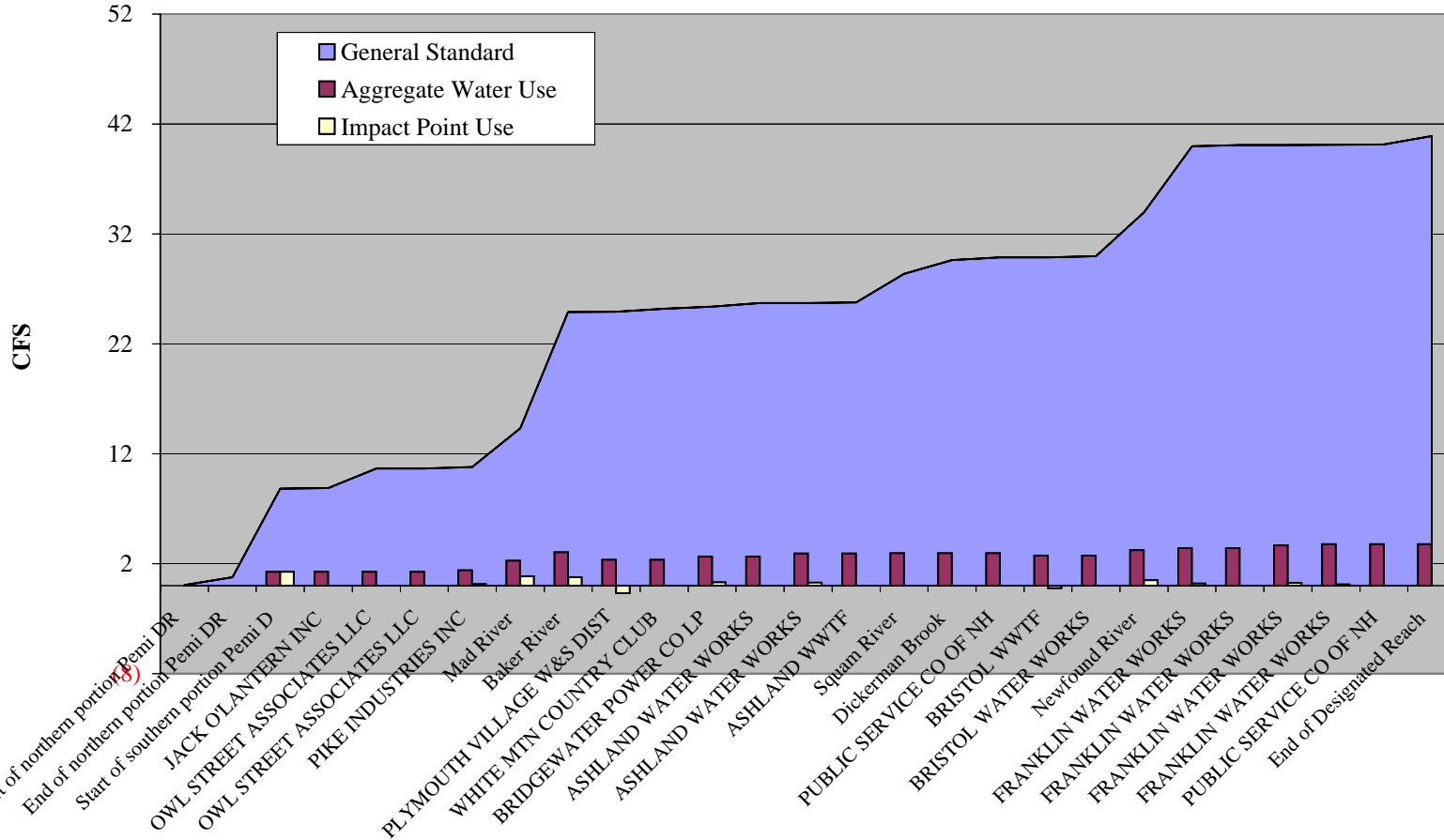
September 2004 Pemigewasset



October 2004 Pemigewasset



November 2004 Pemigewasset



December 2004 Pemigewasset

