

Maumee River Discharge

A summary of Maumee River discharge for the period April 2005 through September 2007 is presented in Table 1. Except for two months in 2005 (June, August), the predominant source of cooling water for Bay Shore Power Plant is the Maumee River. In August 2005, a sizeable fraction of cooling water was derived from Maumee Bay.

Table 1
Source of Cooling Water for Bay Shore Power Plant

Date	Maumee River Discharge *		Bay Shore Cooling Water		Source of Cooling Water	
	Monthly Mean cfs	Million Gallons	Million Gallons	% of Maumee River	Maumee River	Maumee Bay
Apr-05	7,542	146,235	22,377	15%	√	
May-05	3,218	64,475	20,727	32%	√	
Jun-05	1,104	21,406	22,377	105%	96%	4%
Jul-05	1,569	31,436	22,386	71%	√	
Aug-05	487	9,759	22,178	227%	44%	56%
Sep-05	2,028	39,322	22,377	57%	√	
Oct-05	1,155	23,141	23,123	100%	√	
Nov-05	3,955	76,685	22,377	29%	√	
Dec-05	8,567	171,646	23,123	13%	√	
Jan-06	14,260	285,710	23,123	8%	√	
Feb-06	9,779	176,969	20,885	12%	√	
Mar-06	6,401	128,249	23,123	18%	√	
Apr-06	4,688	90,898	22,377	25%	√	
May-06	10,230	204,966	23,123	11%	√	
Jun-06	3,422	66,351	22,377	34%	√	
Jul-06	4,362	87,396	23,123	26%	√	
Aug-06	1,192	23,883	23,123	97%	√	
Sep-06	1,256	24,353	NA	NA	NA	NA
Oct-06	6,782	135,883	23,123	17%	√	
Nov-06	6,299	122,134	22,377	18%	√	
Dec-06	15,480	310,154	23,123	7%	√	
Jan-07	23,770	476,250	NA	NA	NA	NA
Feb-07	1,216	22,006	NA	NA	NA	NA
Mar-07	17,240	345,417	NA	NA	NA	NA
Apr-07	9,840	190,792	NA	NA	NA	NA
May-07	3,750	75,134	NA	NA	NA	NA
Jun-07	565.6	10,967	NA	NA	NA	NA
Jul-07	440.6	8,828	NA	NA	NA	NA
Aug-07	11,740	235,220	NA	NA	NA	NA
Sep-07	2,623	50,859	NA	NA	NA	NA

* Maumee River at Waterville Ohio (USGS 0419350)

Maumee River Discharge Versus Larval Entrainment

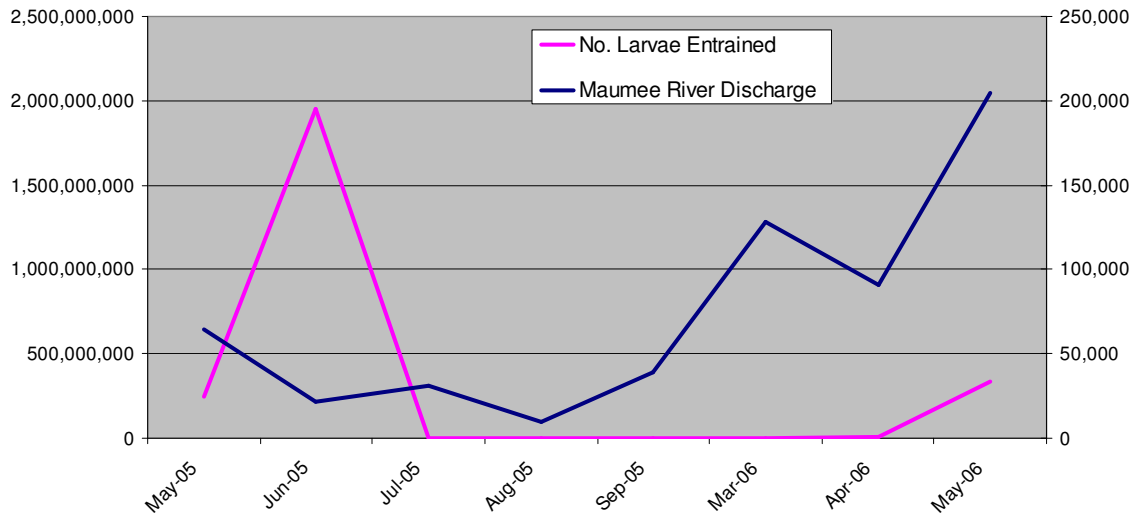
A summary of Maumee River discharge versus larval entrainment at Bay Shore Power Plant is presented in Table 2 and Figure 1. No clear relationship was observed between entrainment and river flow. Larval entrainment was comparable in May-05 and May-06 despite the fact that flows for the Maumee River in May-05 were 3 times lower than that observed in May-06.

Table 2
Maumee River Discharge Versus Larval Entrainment

Month	Maumee River Discharge*	No. Larvae Entrained
May-05	64,475	246,923,900
Jun-05	21,406	1,948,068,015
Jul-05	31,436	1,351,666
Aug-05	9,759	414,186
Sep-05	39,322	0
Mar-06	128,249	0
Apr-06	90,898	7,990,066
May-06	204,966	331,926,273

* million gallons

Figure 1
Maumee River Discharge Versus Larval Entrainment



Maumee River Discharge Versus Fish Impingement

A summary of Maumee River discharge versus fish impingement at Bay Shore Power Plant is presented in Table 3 and Figure 2. No clear relationship was observed between impingement and river flow.

Table 3
Maumee River Discharge Versus Fish Impingement

Month	Maumee River Discharge *	No. Fish Impinged
May-05	64,475	651,373
Jun-05	21,406	1,175,648
Jul-05	31,436	3,653,593
Aug-05	9,759	1,100,434
Sep-05	39,322	1,108,736
Oct-05	23,141	10,242,235
Nov-05	76,685	9,106,170
Dec-05	171,646	12,865,242
Jan-06	285,710	3,151,575
Feb-06	176,969	1,935,340
Mar-06	128,249	7,683,592
Apr-06	90,898	4,116,642
May-06	204,966	899,576
Oct-06	135,883	5,419,319
Nov-06	122,134	2,961,888
Dec-06	310,154	2,063,091

* million gallons

Figure 2. Maumee River Discharge Versus Fish Impingement

