Estimated and target daily Total Phosphorus (TP) loads for the Portneuf River at Topaz (expressed based on monthly averages in lbs/day). Estimated loads represent the product of average monthly flow and TP concentrations from monthly sampling activities or from predicted TP concentrations using the average monthly discharge at the USGS Topaz gage.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2004 Estimated TP load	**20.8**	**20.8**	**48.6**	**30.5**	**52.7**	**34.4**	**59.1**	**32.9**	**1.9**	**19.4**	**10.9**	**16.0**
2004 Target load*	33.0	33.1	45.4	86.7	119.9	102.3	54.4	32.9	26.6	25.2	36.4	37.2
2005 Estimate TP load	**24.3**	**23.0**	**38.6**	**55.9**	**141.4**	**75.1**	**49.7**	**44.1**	**20.2**	**13.7**	**28.0**	**20.8**
2005 Target load*	36.2	34.9	54.1	112.7	168.3	146.6	82.8	52.3	30.8	30.4	43.6	44.2
2006 Estimated TP load	**51.1**	**40.1**	**64.6**	**1050**	**858.2**	**201.9**	**74.0**	**64.6**	**37.3**	**21.5**	**21.7**	**43.0**
2006 Target load*	51.1	41.2	62.0	336.5	468.5	194.1	68.2	57.2	48.3	50.1	52.3	47.8
Average TP load (04 to 06)	**32.0**	**27.9**	**50.6**	**378.8**	**350.8**	**103.8**	**60.9**	**47.2**	**19.8**	**18.2**	**20.2**	**26.6**
Target load and waste load using 10th percentile Q from USGS Topaz Gage	43.0	45.8	51.5	104.6	128.4	121.7	52.2	36.2	31.8	32.3	43.1	44.9
Reduction required based on 04 to 06 average loads and 10th percentile Q from USGS Topaz Gage	**0%**	**0%**	**0%**	**72%**	**63%**	**0%**	**14%**	**23%**	**0%**	**0%**	**0%**	**0%**
Lava HS WWTP TP waste load	1.2*	1.2*	1.2*							1.2*	1.2*	1.2*
Lava HS TP waste load allocation	1.2	1.2	1.2							1.2	1.2	1.2
Waste load reduction required	**0%**	**0%**	**0%**							**0%**	**0%**	**0%**
TP Load reduction required	**0%**	**0%**	**0%**	**72%**	**63%**	**0%**	**14%**	**23%**	**0%**	**0%**	**0%**	**0%**

*Target loads based on 0.07 and 0.125 mg/L low and high flow TP targets. The months of April, May, and June have been established as high flow months for the Topaz monitoring site. Waste load discharge period (1 Oct to May 31 of each year) are based on the City of Lava's NPDES permit (ID-002182-2 approved 1 June 2005). *City of Lava's WWTP waste loads were calculated from discharge and water quality sampling conducted in 2002 and 2003 and reflect a total of approximately 21 days of TP loading in 2007 at a rate of 10.4 lbs/day from October to May; the total load estimate is 218 lbs of TP. To correct for average daily load under a 180 day discharge scenario that occurs from October to March, we used the following: 218 lbs TP (total waste load) ÷ 180 day compliance period = 1.21 lbs/day. This same value was used as the target load during the months October to March.

Estimated and target daily Total Phosphorus (TP) loads for the Portneuf River above Marsh Creek (expressed based on monthly averages in lbs/day). Estimated loads represent the product of average monthly discharge and TP concentrations from monthly sampling activities.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2004 Estimated TP load	**13.9**	**13.9**	**51.4**	**32.2**	**4.7**	**4.8**	**2.6**	**2.2**	**0.4**	**3.7**	**7.5**	**10.5**
2004 Target load*	33.5	33.6	86.2	84.0	17.6	7.9	5.9	4.6	5.0	13.0	37.5	38.6
2005 Estimate TP load	**17.6**	**9.2**	**32.4**	**72.5**	**146.4**	**69.0**	**3.4**	**7.8**	**3.2**	**19.1**	**18.5**	**10.1**
2005 Target load*	37.3	35.8	104.9	124.2	175.9	65.2	8.2	6.3	6.2	29.7	46.2	47.0
2006 Estimated TP load	**59.1**	**31.6**	**65.2**	**1036**	**2122**	**103.9**	**7.4**	**3.7**	**3.3**	**32.3**	**25.1**	**54.1**
2006 Target load*	55.1	43.3	121.7	392.3	498.6	55.1	9.1	7.9	9.7	51.4	56.7	51.2
Average TP load (04 to 06)	**30.2**	**18.2**	**49.7**	**380.1**	**757.7**	**59.2**	**4.5**	**4.6**	**2.3**	**18.4**	**17.0**	**24.9**
Target load using 2004 Q (3rd percentile) at Portneuf River above Marsh Creek predicted from USGS Topaz and Pocatello Gages	33.5	33.6	86.2	84.0	17.6	7.9	5.9	4.6	5.0	13.0	37.5	38.6
Reduction required based on 04 to 06 average loads and 2004 Q (3rd percentile) at Portneuf River above Marsh Creek predicted from USGS Topaz and Pocatello Gages	**0%**	**0%**	**0%**	**78%**	**98%**	**87%**	**0%**	**0%**	**0%**	**29%**	**0%**	**0%**

*Target loads based on 0.07 and 0.125 mg/L low and high flow TP targets. The months of March, April, and May have been established as high flow months.

Estimated and target daily Total Phosphorus (TP) loads for Lower Marsh Creek (expressed based on monthly averages in lbs/day). Estimated loads represent the product of average monthly discharge and TP concentrations from monthly sampling activities.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2004 Estimated TP load	**17.4**	**20.0**	**148.3**	**26.5**	**14.5**	**12.9**	**14.1**	**12.3**	**11.0**	**21.4**	**22.7**	**46.0**
2004 Target load*	16.7	17.7	59.4	36.8	30.2	18.8	15.7	13.3	17.5	25.4	22.3	23.5
2005 Estimate TP load	**32.8**	**35.2**	**149.8**	**50.1**	**101.3**	**43.7**	**15.4**	**9.4**	**13.7**	**24.3**	**28.7**	**65.7**
2005 Target load*	22.3	22.0	78.0	58.5	86.2	43.1	22.4	15.3	21.3	27.0	24.8	29.1
2006 Estimated TP load	**126.7**	**91.9**	**866.6**	**295.4**	**226.7**	**39.6**	**33.4**	**17.3**	**37.4**	**38.5**	**37.9**	**57.7**
2006 Target load*	43.9	34.1	112.1	157.8	125.9	31.8	25.4	19.8	29.1	29.6	30.2	28.4
Average TP load (04 to 06)	**59.0**	**49.0**	**388.2**	**124.0**	**114.2**	**32.1**	**21.0**	**13.0**	**20.7**	**28.1**	**29.8**	**56.5**
Target load using 10th percentile Q at Lower Marsh Creek predicted from USGS Marsh Creek Gage	22.6	25.9	60.0	43.4	30.4	15.7	14.5	14.0	19.6	24.0	22.7	23.6
Reduction required based on 04 to 06 average loads and 10th percentile Q at Lower Marsh Creek predicted from USGS Marsh Creek Gage	**62%**	**47%**	**85%**	**65%**	**73%**	**51%**	**31%**	**0%**	**5%**	**14%**	**24%**	**58%**

*Target loads based on 0.07 and 0.125 mg/L low and high flow TP targets. The months of March, April, and May have been established as high flow months.

Estimated and target daily Total Phosphorus (TP) loads for the Portneuf River at Edson Fichter Nature Area (EFNA; expressed based on monthly averages in lbs/day). Estimated loads represent the product of average monthly flow and TP concentrations from monthly sampling activities.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2004 Estimated TP load	**34.7**	**71.1**	**208.6**	**113.1**	**39.5**	**25.8**	**9.2**	**5.3**	**4.7**	**11.7**	**22.1**	**49.9**
2004 Target load*	50.1	91.0	169.0	164.4	66.7	24.7	9.5	5.7	10.4	26.5	46.9	53.7
2005 Estimate TP load	**41.4**	**33.3**	**160.4**	**157.6**	**409.2**	**236.4**	**11.5**	**17.1**	**9.4**	**47.2**	**71.4**	**61.9**
2005 Target load*	53.9	93.4	175.3	180.8	287.4	110.3	16.1	9.9	17.3	53.3	70.4	76.0
2006 Estimated TP load	**208.9**	**777.7**	**978.5**	**2452**	**955.9**	**212.9**	**31.2**	**13.4**	**45.0**	**75.3**	**62.2**	**103.8**
2006 Target load*	91.4	123.0	230.3	605.7	694.7	93.7	26.7	18.1	43.7	79.9	92.7	86.5
Average TP load (04 to 06)	**95.0**	**294.0**	**449.2**	**907.6**	**468.2**	**158.3**	**17.3**	**11.9**	**19.7**	**44.7**	**51.9**	**71.9**
Target load and waste load using 10th percentile Q at Batiste predicted from USGS Pocatello Gage	64.7	128.3	171.6	163.1	63.1	16.1	6.0	8.1	14.5	28.0	52.0	65.8
Reduction required based on 04 to 06 average loads and 10th percentile Q at Batiste predicted from USGS Pocatello Gage	**32%**	**56%**	**62%**	**82%**	**87%**	**90%**	**65%**	**32%**	**26%**	**37%**	**0%**	**8%**
City of Inkom WWTP TP waste load	**2.43**	**2.46**	**1.47**	**1.47**	**1.56**	**0.95**	**0.71**	**1.71**	**1.02**	**0.68**	**1.97**	**1.45**
City of Inkom waste load allocation	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71
Waste load reduction required	**71%**	**71%**	**52%**	**52%**	**54%**	**25%**	**0%**	**58%**	**30%**	**0%**	**64%**	**51%**
TP Load reduction required	**31%**	**56%**	**62%**	**82%**	**86%**	**90%**	**65%**	**26%**	**25%**	**37%**	**0%**	**7%**

*Target loads based on 0.07 and 0.125 mg/L low and high flow TP targets. The months of February, March, April, and May have been established as high flow months for the EFNA monitoring site. Waste load targets are based on the City of Inkom's NPDES permit (ID-002024-9; 0.71 lbs TP/day). City of Inkom WWTP discharge and TP records were taken from the IDEQ's DMR database for Calendar Year 2007, except the reported Nov 2006 load used for missing Nov 2007 load.

Estimated and target daily Total Phosphorus (TP) loads for the Portneuf River at Batiste Rd (expressed based on monthly averages in lbs/day). Estimated loads represent the product of average monthly flow and TP concentrations from monthly sampling activities.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2004 Estimated TP load	**28.0**	**81.0**	**298.2**	**154.0**	**331.4**	**30.5**	**38.5**	**17.0**	**7.6**	**21.3**	**31.8**	**57.1**
2004 Target load*	57.7	104.7	188.2	183.3	78.6	30.5	14.2	10.1	15.1	32.4	54.3	61.5
2005 Estimate TP load	**44.1**	**42.0**	**319.9**	**231.4**	**542.0**	**204.3**	**16.1**	**15.2**	**16.1**	**49.7**	**61.3**	**68.4**
2005 Target load*	61.8	107.2	195.1	200.9	315.1	122.2	21.2	14.6	22.6	61.1	79.4	85.4
2006 Estimated TP load	**212.6**	**71.2**	**922.6**	**2011**	**1034**	**244.7**	**35.4**	**16.0**	**37.8**	**140.8**	**79.7**	**117.5**
2006 Target load*	102.0	139.0	254.0	656.4	751.7	104.4	32.6	23.4	50.9	89.6	103.3	96.7
Average TP load (04 to 06)	**94.9**	**64.7**	**513.5**	**798.8**	**635.9**	**159.8**	**30.0**	**16.1**	**20.5**	**70.6**	**57.6**	**81.0**
Target load using 10th percentile Q at Batiste predicted from USGS Pocatello Gage	73.3	144.7	191.1	181.9	74.7	21.3	10.4	12.7	19.6	34.0	59.7	74.5
Total load and waste load reductions required based on 04 to 06 average loads and 10th percentile Q at Batiste predicted from USGS Pocatello Gage	**23%**	**0%**	**63%**	**77%**	**88%**	**87%**	**65%**	**21%**	**4%**	**52%**	**0%**	**8%**
Average (based on 04 to 06 loads) City of Pocatello stormwater TP waste load	0	9.4	64.4	57.3	167.7	1.5	12.7	4.2	0.8	25.9	5.7	9.1
Average (based on 04 to 06 loads) City of Pocatello stormwater TP waste load allocation	10.6	21.0	25.1	30.5	30.5	10.6	6.2	6.0	6.9	8.7	10.2	9.4
Stormwater TP waste load reduction required	**0%**	**0%****	**61%**	**47%****	**82%**	**0%**	**51%**	**0%**	**0%**	**66%**	**0%**	**0%**
TP Load reduction required	**23%**	**0%**	**60%**	**76%**	**85%**	**87%**	**56%**	**21%**	**4%**	**36%**	**0%**	**8%**

*Target loads based on 0.07 and 0.125 mg/L low and high flow TP targets. The months of February, March, April, and May have been established as high flow months for the Batiste monitoring site. Waste loads for the City of Pocatello's stormwater are presented as the difference in TP load estimates from the Batiste and EFNA monitoring stations. Waste load allocations were established using the difference in discharge between the Batiste and EFNA monitoring stations multiplied by the high and low flow TP targets.
**Stormwater contributions from years 2004 and 2005 only were used because of unusually high values at Fichter in Feb 2006 and Fichter and Batiste in April 2006.

Estimated and target daily Total Phosphorus (TP) loads for the Portneuf River at Siphon Rd (expressed based on monthly averages in lbs/day). Estimated loads represent the product of average monthly flow and TP concentrations from monthly sampling activities.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2004 Estimated TP load	**2700**	**1982**	**2084**	**2900**	**1974**	**1960**	**1884**	**1767**	**2064**	**1957**	**2188**	**2449**
2004 Target load*	146.5	263.3	346.9	341.9	237.2	119.3	103.0	98.9	104.0	121.2	143.1	150.4
2005 Estimate TP load	**2646**	**2723**	**3226**	**2333**	**3146**	**2804**	**2233**	**2305**	**2339**	**2441**	**2668**	**3087**
2005 Target load*	150.6	265.9	353.7	359.5	473.8	211.1	110.1	103.4	111.4	149.9	168.3	174.3
2006 Estimated TP load	**2565**	**3572**	**3037**	**5007**	**3343**	**2468**	**2463**	**2789**	**2954**	**2982**	**3321**	**3446**
2006 Target load*	190.8	297.6	412.6	815.0	910.4	193.3	121.4	112.2	139.7	178.4	192.1	185.6
Average TP load (04 to 06)	**2637**	**2759**	**2782**	**3413**	**2821**	**2411**	**2193**	**2287**	**2452**	**2460**	**2726**	**2994**
Target load and waste load using 10th percentile Q at Siphon predicted from Batiste Q + estimated average groundwater gains between Batiste and Siphon Monitoring Stations	162.1	303.3	349.7	340.5	233.4	110.1	99.3	101.5	108.4	122.9	148.5	163.4
Reduction required based on 04 to 06 average loads and 10th percentile Q at Siphon predicted from Batiste Q + estimated average groundwater gains between Batiste and Siphon Monitoring Stations	**94%**	**89%**	**87%**	**90%**	**92%**	**95%**	**95%**	**96%**	**96%**	**95%**	**95%**	**95%**
City of Pocatello WWTP TP waste load	**27.9**	**36.8**	**71.3**	**148.5**	**32.7**	**35.0**	**70.1**	**24.4**	**18.4**	**101.0**	**29.7**	**21.7**
City of Pocatello WWTP TP waste load allocation	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0	23.0
WWTP TP waste load reduction required	**18%**	**38%**	**68%**	**85%**	**30%**	**35%**	**67%**	**6%**	**0%**	**77%**	**23%**	**0%**
TP Load reduction required	**94%**	**89%**	**87%**	**90%**	**92%**	**95%**	**95%**	**96%**	**96%**	**95%**	**95%**	**95%**

*Target loads based on 0.07 and 0.125 mg/L low and high flow TP targets. TP waste load targets based on the City of Pocatello's design flows (11 mgd or 17 cfs). City of Pocatello WWTP TP concentrations represent monthly medians from IDEQ's DMR database for Calendar Year 2007.