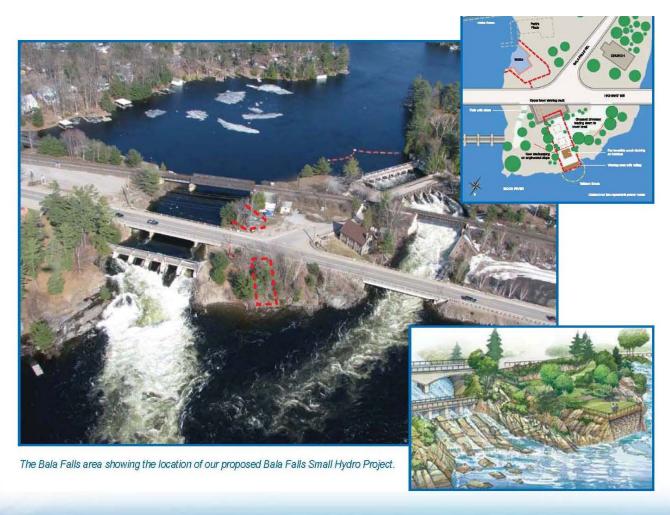


#### Presentation to:

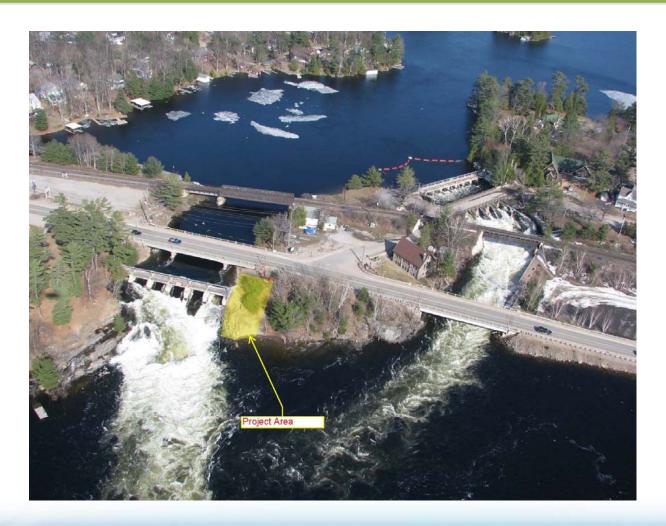
# Flow Distribution Committee Meeting #4 – September 17, 2014



# **Old Project Site**



# **New Project Site**





### Other Commitments for Water

- MRWMP minimums over falls: 1 m3/s over each dam
- Burgess G.S.: 4 m3/s if available after above commitment
- \* Fisheries: (subject to final approval by DFO)
  - 9.5 m3/s over North Dam during spawning (~last 2 weeks of April)
  - 2.0 m3/s over North Dam during incubation (~first 2 weeks of May)
- \* OPG's Downstream Facilities:
  - Cannot impact operations or revenues of downstream facilities
  - When inflow is less than 20 cms, plant should be cycled to ensure minimum of 20 m3/s is maintained – should be timed to provide adequate navigable water conditions for Go Home Lake on Fri and Sun evenings.
  - Apr 15-Jun 1: continuous min. discharge of 14 m3/s for spawning.
- (\* Denotes new requirements since release of ESRR)



## Original Flow Distribution Plan (as per ESRR – Oct/09)

Flow (m3/s)	Burgess GS	North Dam	South Dam	New Plant
Oct 15 to May 31				
0 to 5	0	1	1 to 4	0
6 to 19	4	1	1 to 14	0
20 to 102	4	1	1	14 to 96
<b>≻</b> 102	4	1	(flow – 101)	96
Jun 1 to Oct 15				
0 to 5	0	1	1 to 4	0
6 to 20	4	1	1 to 15	0
21 to 103	4	1	2	14 to 96
<b>≻</b> 103	4	1	(flow – 101)	96



### Average Monthly Flows (m<sup>3</sup>/s) (based on 2009 ESRR)

Month	Ave Total Flow	Ave Plant Flow	Ave Spill	Month	Ave Total flow	Ave Plant Flow	Ave Spill
Jan	83.0	77.0	6.0	Jul	31.6	25.6	6.0
Feb	75.4	69.4	6.0	Aug	22.2	16.3	6.0
Mar	108.2	96.0	12.2	Sep	35.0	29.0	6.0
Apr	153.3	96.0	57.3	Oct	56.0	50.0	6.0
May	107.2	96.0	11.2	Nov	74.0	68.0	6.0
Jun	47.9	41.9	6.0	Dec	91.6	85.6	6.0



### **Committee Comments**

- View of North Falls more important than South Falls;
- View in Summer and Fall more important than Spring and Winter;
- Changing minimum flows as opposed to set value;
- Flow should respect fisheries;
- Slow down flow at North Dam after May 24<sup>th</sup> for swimming;
- Want enough flow to create mist and sound;
- Add boulders to south channel to provide more turbulence;
- Flows should be increased for "important tourist days";
- Concern with water level fluctuations associated with cycling;



# Minimum Flow Over Dams (September 2014)

Period	Minimum Flow (m <sup>3</sup> /s)				
	North Dam	South Dam	Burgess	Total	
Jan 1-Apr 14	1.0	1.0	4.0	6.0	
Walleye Spawning (approx. Apr 15-30)	9.5	1.0	4.0	14.5	
Walleye egg incubation (approx. May 1-14	2.0	1.0	4.0	7.0	
May 15-Jun 30	1.0	1.0	4.0	6.0	
Jul 1-Labour Day (approx. Sep 7)	1.0	2.0	4.0	7.0	
Sep 8 (approx.)-Dec 31	1.0	1.0	4.0	6.0	



# Minimum & Concession Flows During High Use Periods (September 2014)

Period	North Dam		South Dam		Burgess	Total
	Min Flow	Add'l Flow	Min Flow	Add'l Flow	Min Flow Only	
Victoria Day w/e	1.0	3.0	1.0	3.0	4.0	12.0
Canada Day & w/e assoc. with holiday	1.0	1.0	2.0	2.0	4.0	10.0
Simcoe Day (Aug Civic Holiday) w/e	1.0	1.0	2.0	2.0	4.0	10.0
Labour Day w/e	1.0	1.0	2.0	2.0	4.0	10.0
Thanksgiving w/e	1.0	3.0	1.0	3.0	4.0	12.0
Cranberry Festival w/e	1.0	3.0	1.0	3.0	4.0	12.0

7:00 p.m. Friday to 7:00 p.m. Monday (on long weekends) or Sunday



## North Dam Flows (1.0 m<sup>3</sup>/s)





# North Dam (4 m<sup>3</sup>/s)





# North Dam (9.5 m<sup>3</sup>/s)





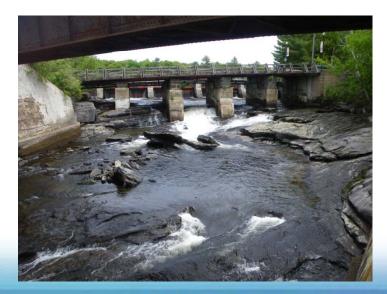
# South Dam (1.0 m<sup>3</sup>/s)











Back to the future building on Bala's legacy

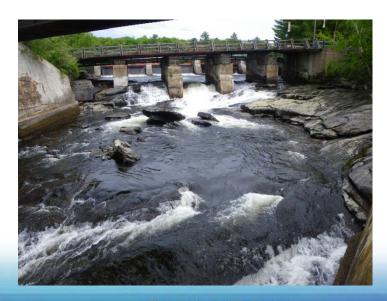
# South Dam (4.0 m<sup>3</sup>/s)











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