

Saratoga Miracle Beach Master Drainage Plan

Electoral Area Services
Committee

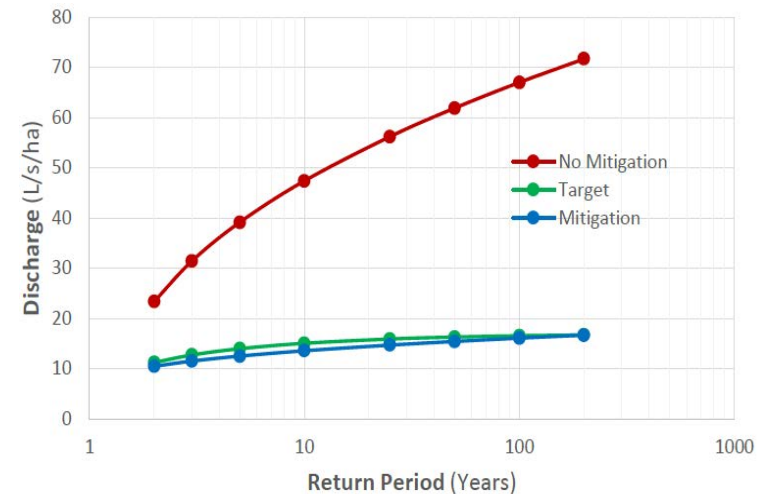
December 9, 2019

Background

- Saratoga Beach – one of three RGS Settlement Nodes
- Concerns with seasonal flooding and drainage impacts due to development
- Master Drainage Plan developed to investigate impacts and identify mitigation options

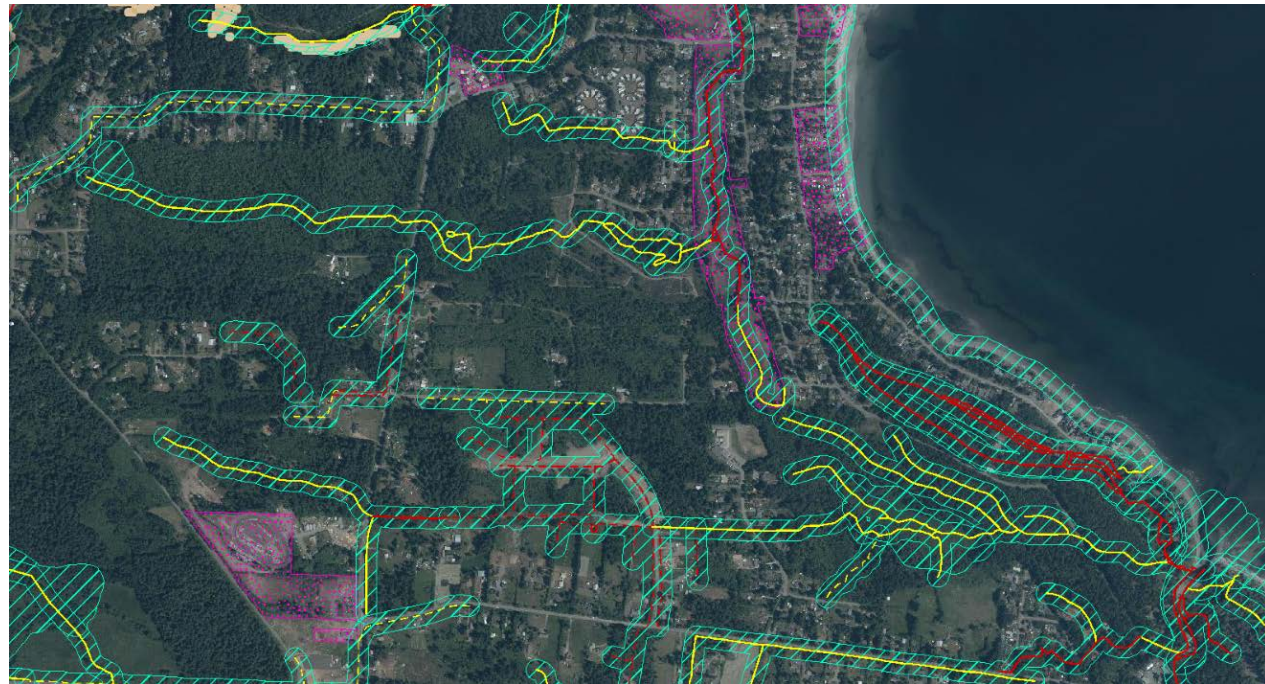
Impacts of Development

- Increased impervious surfaces – higher stormwater flow rates and volumes
 - Increased downstream flood risk
 - Increased stream erosion
 - Damage to aquatic habitat
 - Costs – flood damage, habitat restoration
- Reduced summer base flows



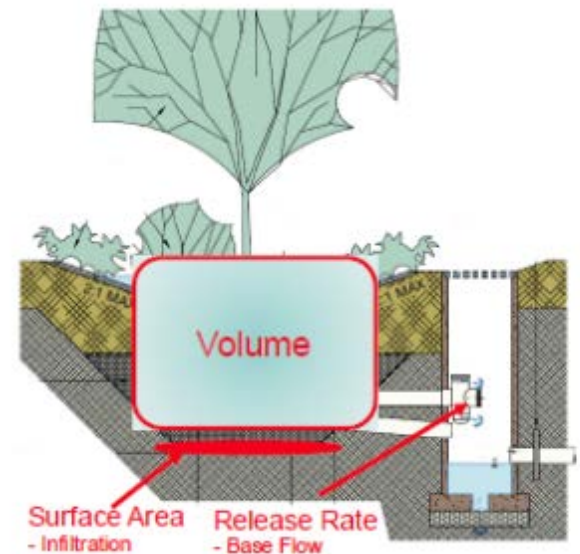
Current Conditions

- Settlement node designation = resulting development pressure
- Limited capacity of existing drainage infrastructure
- Rainwater management requirements
 - Rezoning
 - DP areas



Mitigation Options

- Preserve / restore natural water balance
 - Post-development flows that match pre-development flows in volume/duration
- Master drainage plan targets
- Public & private drainage infrastructure
 - Public detention ponds / linear rain gardens
 - Private on-lot rain gardens
- Potentially funded via LSA



Next Steps

- Incorporate Master Drainage Plan targets
 - Subdivision and Development Servicing Bylaw
 - Rainwater Management Development Permit Area
- Local Service Area establishment
 - Study of service scope and structure options
- Work with MoTI
 - Determine if there are opportunities for rainwater management infrastructure in road right-of-way