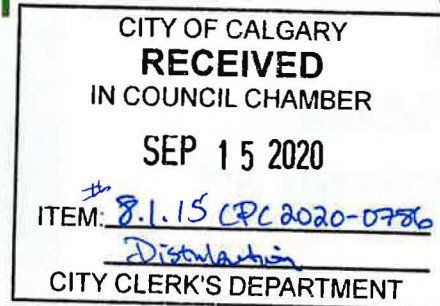




CALGARY
RIVER
VALLEYS



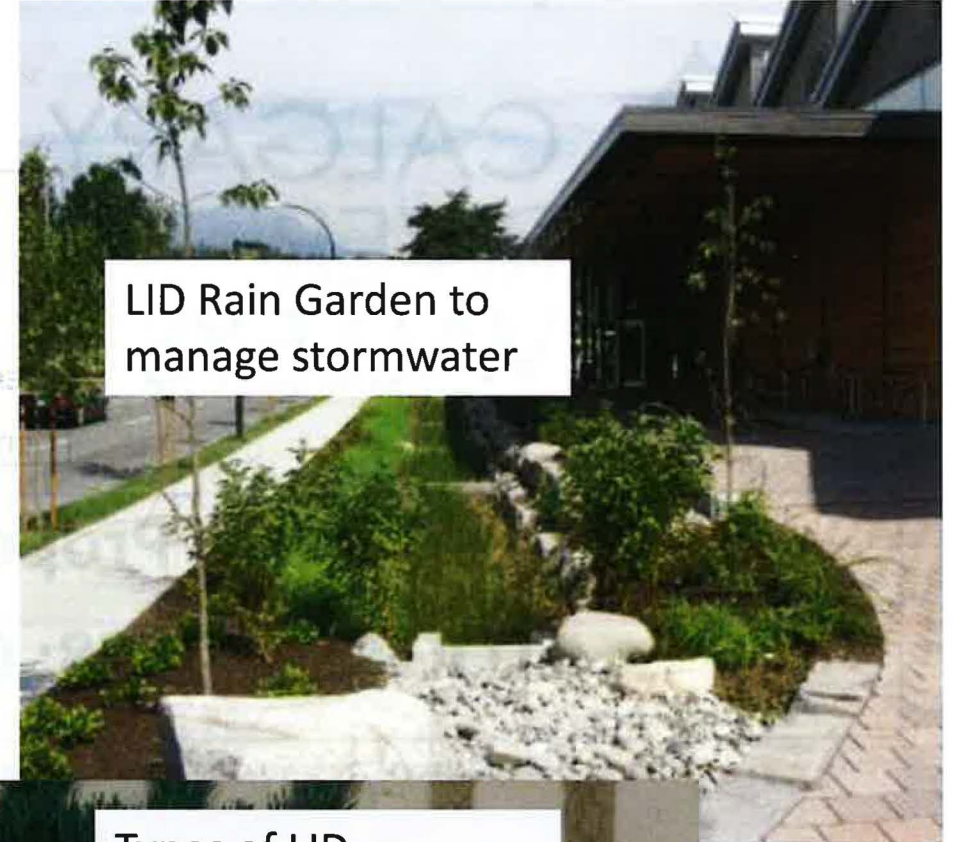
We Are The Voice of Our Rivers

**Regarding Proposed Outline Plan – Alpine Park
LOC2017-0378; CPC2020-0786; Bylaw127D2020**

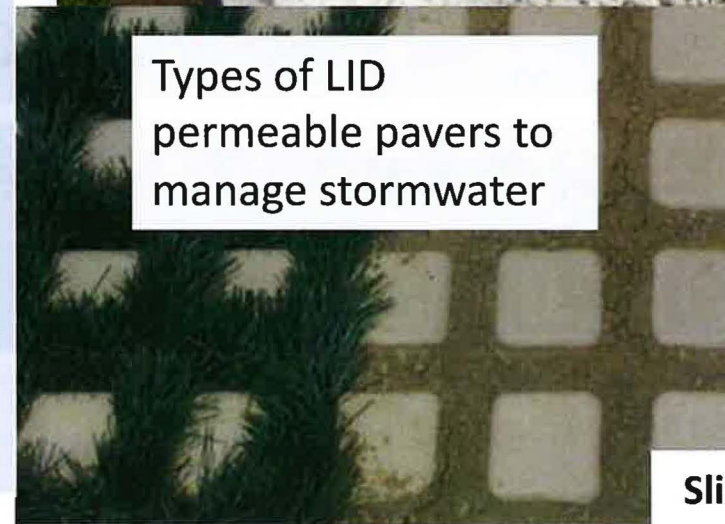
Five Main Categories of Concerns:

- 1) Stormwater; 2) Watershed Boundaries; 3) Groundwater;**
- 4) Cumulative Impacts; 5) Wetland taken as MR vs ER**

Category of Concern	Suggested Actions
Surface Water / Stormwater	<p>Outline Plan should incorporate recommendations made in the Master Drainage Plan & in the Urban Systems 3rd Party Review:</p> <p>1) “Oversize” the stormwater infrastructure to accommodate flows from future development to the west / climate change impacts, & reduce the damaging “fire hose” & sustained higher flow effects of stormwater entering into Fish Creek</p> <p>2) Use Low Impact Development (LID) strategies for managing stormwater onsite, especially with up to 70% of area allowed to be impervious, much higher than normal</p>



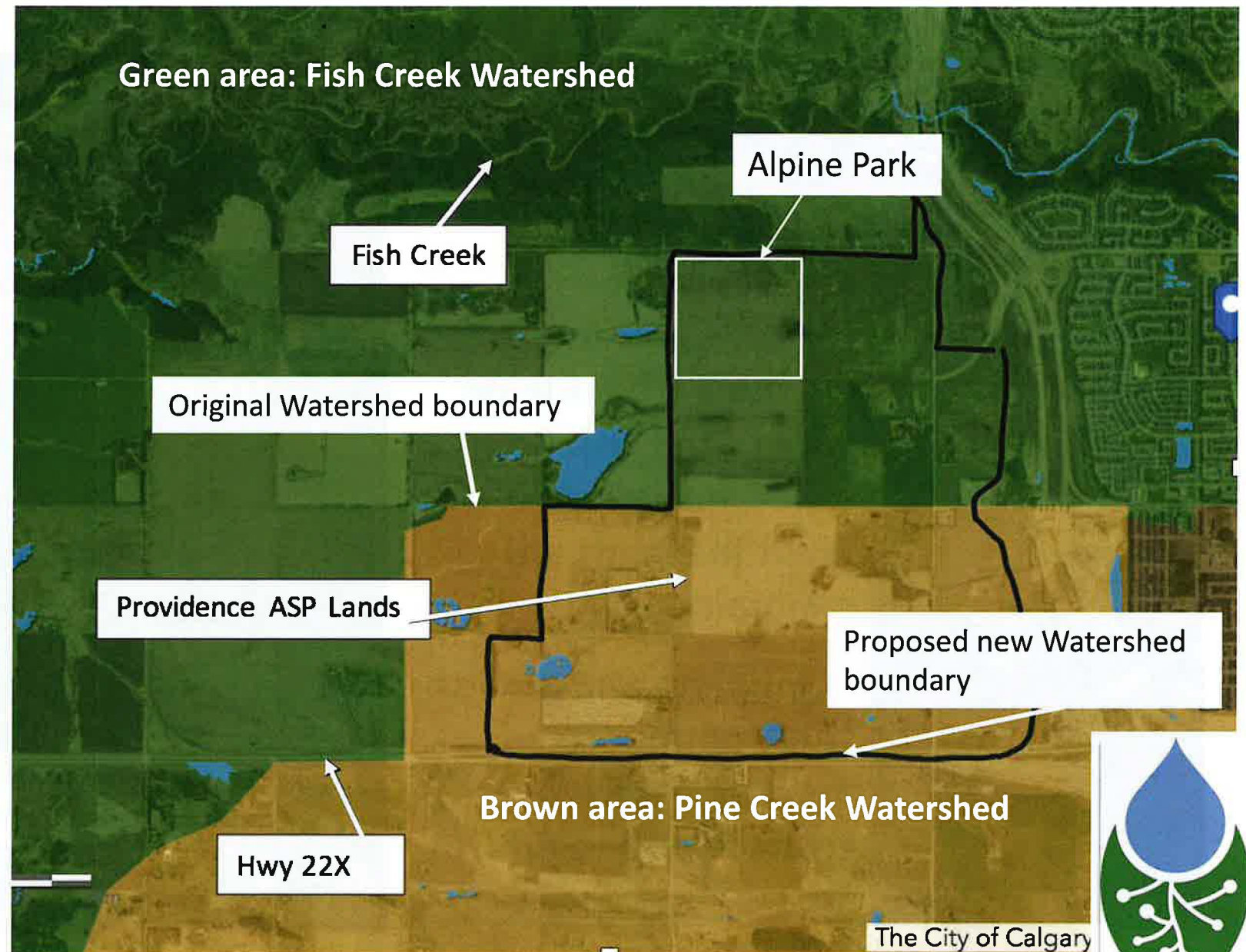
LID Rain Garden to manage stormwater



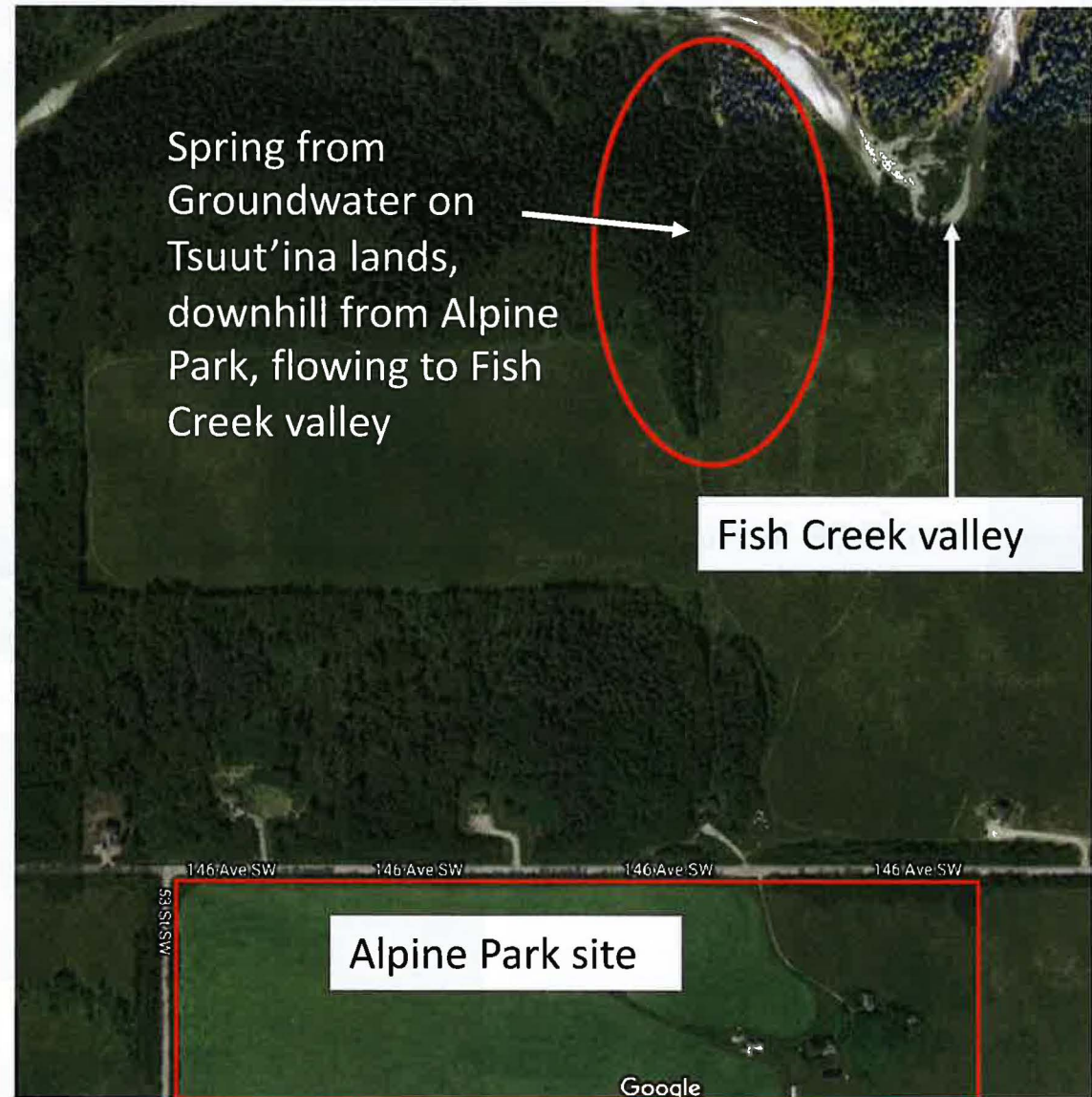
Types of LID permeable pavers to manage stormwater



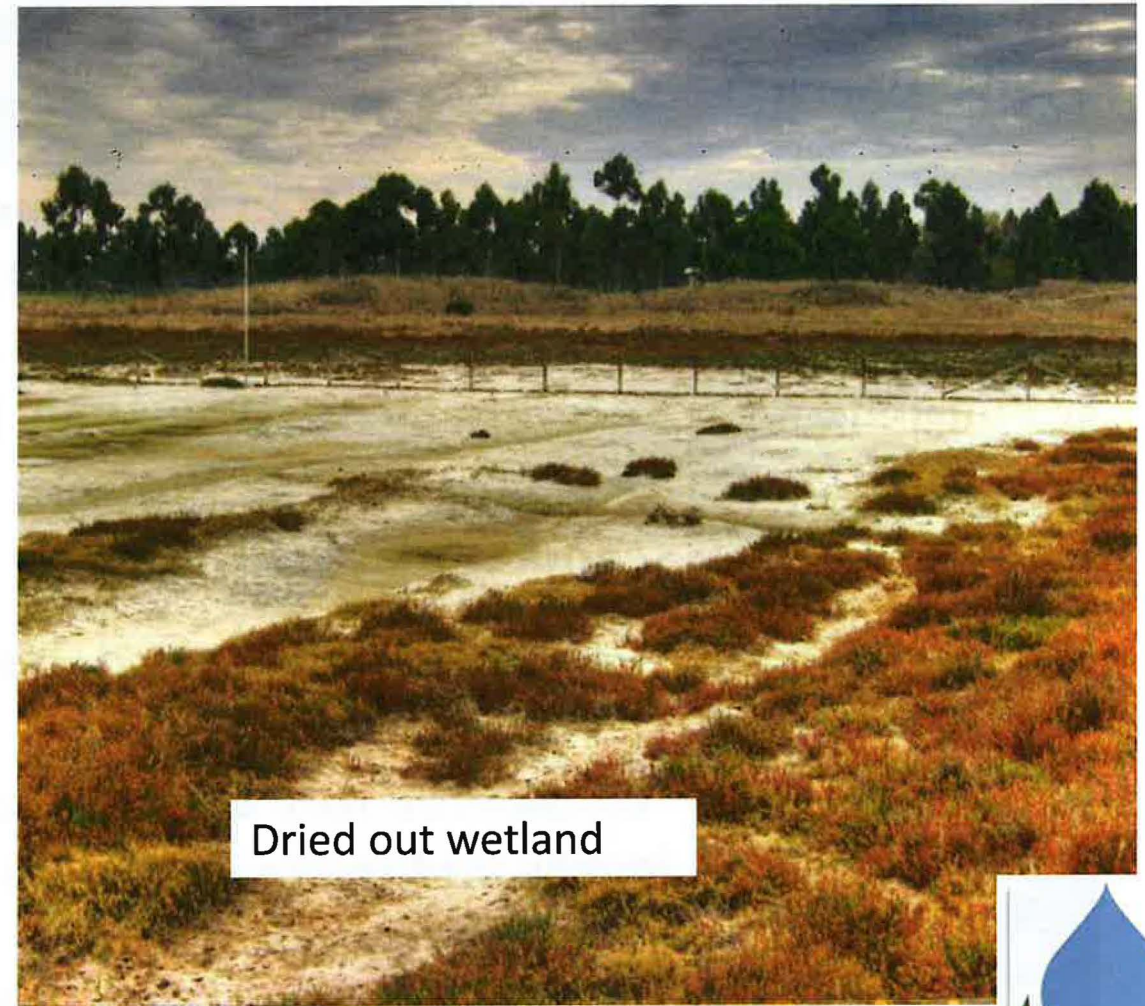
Category of Concern	Suggested Action
Re-Drawing Watershed Boundaries -- Fish Creek & Pine Creek	Detailed study required of anticipated impacts on Fish Creek & Pine Creek → diverting all surface water from the ASP lands into Fish Creek instead of approx. half to Pine Creek



Category of Concern	Suggested Action
Sub-surface Groundwater	<ul style="list-style-type: none"> - Ensure pre-development groundwater flows downhill from Alpine Park to the Fish Creek valley, including Tsuut'ina lands are maintained - Complete and publish study of impacts of proposed changes to groundwater regime in area



Category of Concern	Suggested Action
Cumulative Effects	<p>Clearer understanding required of cumulative impacts from:</p> <ul style="list-style-type: none"> - stripping off surface water & wetlands from Alpine Park & other Providence ASP parcels, - no replenishment of groundwater, especially with up to 70% impervious surfaces allowed within Area Structure Plan (higher than normal)



Dried out wetland



Category of Concern	Suggested Action
<p>Class III wetland re-designation as Municipal Reserve (MR) rather than Environmental Reserve (ER)</p>	<ul style="list-style-type: none"> - The Outline Plan for Alpine Park should claim the higher value Class III wetland area as ER lands, rather than allow it to be counted as MR (future school & playfields) - Providence ASP stated this Tilled Class 3 Wetland was <i>“considered rare and unique locally and regionally...high level function with water quality and habitat for wildlife”</i> and recommended study to understand function & viability

