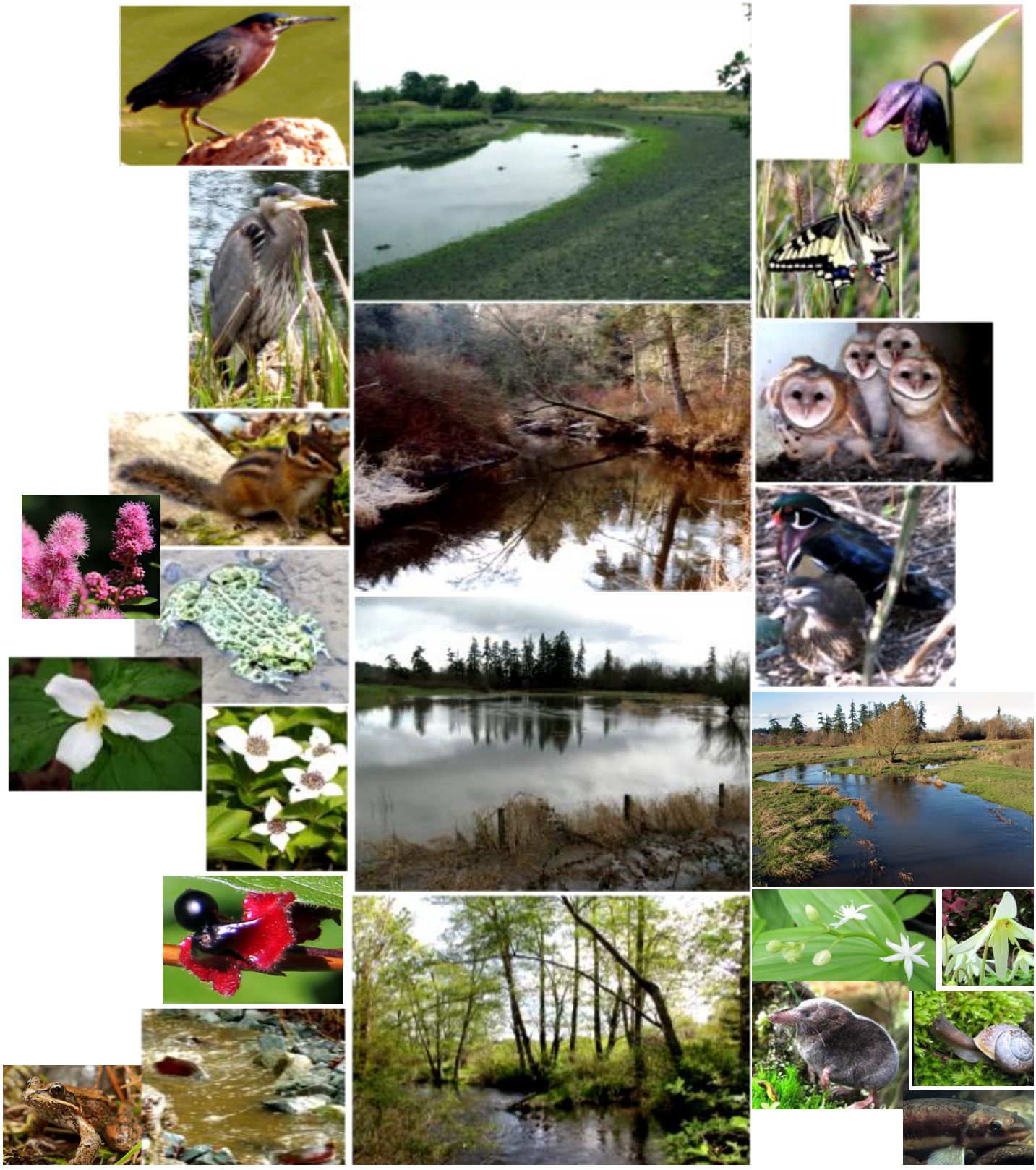

Room for the River

Dreaming for the Little Campbell River

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Photos: LCWS partners

The much-abused word “dream” is at the center of all kinds of human discourse, much of it the purposefully sentimental manipulation of language within a culture struggling to ascertain the boundaries of reality in an era of universal wishful thinking.

That said, the dream of those who have volunteered with both the Little Campbell Watershed Society (LCWS), Semiahmoo Fish & Game Club (SG&GC) & Hatchery, Friends of Semiahmoo Bay Society (FOSBS), A Rocha Brookswood (ARC), and other community groups for many decades is simple: we imagine a river rehabilitated to that state of fish and wildlife productivity that existed even after the first wave of “settler” community development occurred post-contact. Such a process would necessitate:

- large scale improvements to destroyed and damaged riparian areas along the bulk of its fish bearing length
- improved oxygen and temperature profiles
- restored base flows, better pollution mitigation and pollution prevention
- continuing modulation of the existing peak-flow regime
- more stable spawning and rearing habitats, with additional side channel rearing habitats to immediately offset current challenges
- better genetic flow between isolated populations of species

In short a ROOM FOR THE RIVER CORRIDOR. We believe this is the only river in Metro Vancouver where this kind of dream has some hope of fulfillment.

BC’s riverine Natural Capital is unique for a developed country but suffering wherever urban effects are intensifying. Without greater attention to improving habitats in parallel with urban intensification, we can eventually say goodbye to any fishery, commercial or recreational, and flagship species like the Orca.

ROADMAP TO REALIZATION

Realization would immediately necessitate far more sophisticated storm water management, land conversion that prioritizes ecological outcomes, changes that make property owners proud to contribute to a more sustainable watershed.

It’s our further belief that a ROOM FOR THE RIVER CORRIDOR, as opposed to a system of so-called setbacks, is the only route to rehabilitation. The received, practiced and entrenched wisdom that setbacks alone will save fish and wildlife in local rivers is at odds with the science that has historically pointed to productivity declines.

For years Surrey Environmental Partners has been spelling out the need for 3 additional large, legacy parks in Surrey and the need for a Regional or National Park presence in South Surrey as an adjunct to Surrey being the hub of current development, without thought to the major greenspace that should accompany it at the south end of Surrey. An urban national park is not new, there is one in Toronto already and soon there will be one in Montreal.

Imagine if Vancouver’s first Council had balked at the idea of Stanley Park simply because they were completely surrounded by an endless supply of trees. Instead something quite remarkable happened. In the face of the huge population increase predicted for the Lower Mainland, we see the need for a similar, astounding quantum leap, a recognition that we are not recognizing an easy to destroy legacy if we do not fully protect the one remaining river in the lower mainland that has a chance at substantial rehabilitation.

The Rouge River in Ontario enjoys both its own Conservation Authority which helps facilitate cross jurisdictional co-operation and more recently the Rouge River National Park. The Little Campbell Watershed deserves consideration for siting just such a national park. Currently the Little Campbell Watershed Society interfaces with six different jurisdictions in addition to the provincial and federal governments.

Very quickly a collaborative framework like the pan-jurisdictional authority established for the Rouge River should be immediately established as local, regional and federal governments step up to the plate and recognize this vision of a river corridor.

The only way to partially offset the biomass destruction that is happening today is to build a Little Campbell Corridor and restore the riparian area. Huge areas of South Surrey forest area (forests contain 80 % of terrestrial biodiversity) are being densified or converted, meaning huge losses of biomass and ecological services. Integrated Storm Water Management Plans do not account for losses of biomass, biodiversity and endangered wildlife. A Room for the River Corridor is THE SOLUTION to many problems!

WHAT IF THE DREAM IS NEVER REALIZED?

Most importantly, the stated goals of Semiahmoo First Nation around restored traditional food sources will simply lose any possibility of fulfillment. Shellfish harvesting is a priority that requires clean water flowing into the bay. Though the LCWS and partners have worked tirelessly for water quality to improve point and non-point pollution, a protected river corridor will go along way to improve the waters.

As the Lower Mainland marches toward a projected addition of a million residents in the next few decades, this watershed offers the single best opportunity for decision-makers in all levels of government to come together and find common cause in intensifying mitigation, compensation and greenspace in one specific area. The United Nations tells us that planet-wide biodiversity will have decreased 2/3 by 2020. Around the world humanity is preserving the genetic code for dying biodiversity by employing zoos and preserves until such time as habitats might be rehabilitated to support the currently unsupportable. This won't work with Pacific salmon species - we either steward their habitats or risk seeing specific genetic strains die forever. The Little Campbell supports 5 species of salmon and trout including a unique genetic variation of chinook. The watershed is home to at least 34 species at risk.

With continued business as usual the Little Campbell may be the only river still functioning as some sort of bio-sanctuary in South Surrey come 2050, albeit in a much diminished form. We're advocating for something better than a shadow of the shadow we are now fighting to save.

The alternative is just more "life support" as the river continues its slide towards palliative care.

Seemingly lost amongst all the talk we hear of GREENEST CITIES ON THE PLANET, this is an opportunity to be carefully examined.

Calling the Little Campbell River a natural jewel and the most salmon productive for its size in the Lower Mainland feels good, but remember this river also meets the criteria for BC's MOST ENDANGERED RIVERS list. Its productivity is not a fifth of what it was mere decades ago and probably not a thirtieth of what it was at the time of European contact.

Every BC resident has an interest in the survival of the salmon; the historical symbol for our home ecosystem that connects everything from tiny invertebrates to orcas. It really is now or never for bold action from policy makers.

CURRENT THREATS IN THE WATERSHED

WATER FLOWS including quicker and larger peak flows causing flooding, spawning habitat loss, nutrient loss, general moisture loss in the landscape and poor summer base-flows caused by unchecked/unbalanced overuse of river water for human purposes. Lower baseflows in turn result in damaging high temperature regimes.

DESTRUCTION OF INSTREAM HABITATS including removal of watercourses that are ideal for young salmonids, much due to land conversion or higher intensity use.

POLLUTION including agricultural pollution by pesticides and industrial fertilizers, pollution from animal husbandry, automotive and industrial pollution, dumping.

LAND CONVERSION nudging the river to a non-permeable ratio of over 9-11%, the magic number at which watershed decline becomes measurable, and the landscape becomes pauperized of year-round moisture and nutrients.

DESTRUCTION OF RIPARIAN AREAS - naturally wide, densely vegetated, high canopied - these are one of the main keys to a healthy watershed functioning properly, they cushion watercourses in terms of nutrient balance, water balance, temperature balance, air & water pollution control and a functioning balance with all forms of vertebrates and invertebrates.

THE DREAM: BARRIERS AND SOLUTIONS

BARRIER: The River does not have an Ecological Master Plan nor an Environmental Flow Study to prioritize and direct development and infrastructure changes that need to be put in place to ensure the healthy future of the Little Campbell River.

Unfortunately, despite promises made by decision-makers in years past to spare the Little Campbell the mistakes made in the Nicomekl and Serpentine watersheds, current planning initiatives do not reflect focused government desire to turn around a noticeable decline of what we value in the watershed. Hard infrastructure legacy gets far more dollars than our Natural Capital legacy. That said the City of Surrey has gone some distance toward our 'ROOM FOR THE RIVER' concept on one tributary, Fergus Creek, and we salute that.

SOLUTION: Eight jurisdictions, including provincial and federal government, get together and co-operate; working together to complete an Ecological Master Plan and Environmental Flow Study.

BARRIER: The Region does not have enough capital for large scale purchases to offset the fact that Surrey is taking a significant percentage of Regional population growth. While the Metro Vancouver 2040 Plan states "to protect, enhance and restore ecologically important systems, features and corridors and establish buffers along watercourses", this kind of language alone is not enough scaffolding for true river rehabilitation.

SOLUTION: Local, regional and federal governments need to stop seeing the preservation of habitat as an inconvenience and start working together. Open-space purchases can be prioritized to preserve riverine habitat. All jurisdictions would benefit from a Room for the River Corridor so funds should be pooled together to achieve this. Protection can be increased by incentivizing measures applied to river corridor properties. Protection need not be limited to conservancy strategies. Property owners "opting in" to protect the river corridor by modifying their land use to ones in line with ecological preservation can be compensated through municipal or provincial (in the case of farmland) initiatives.

BARRIER: Daily people dream up new schemes at odds with our "dream" and almost everyone asks for relaxation of existing regulations because they believe that the "environment" should basically consist of development remnants - not that it is the most important organ within city metabolism.

SOLUTION: A dedicated river corridor set aside ahead of population growth beside the river that acts to preserve what cannot be saved by a reactionary program of remnant set-asides. Riparian setbacks alone cannot save the biological productivity of river or watershed, but they are the key in moving toward a proper riparian corridor.

APPENDIX:

(1) THE ROUGE WATERSHED: The Province of Ontario began studying protection for the Rouge River soon after WWII. The river has a provincially mandated ecological master plan as a protected watershed; Canada has an urban National Park within the Rouge watershed and whereas the nascent Montreal National park will not be riverine, at least they will have one. Where will the Greater Vancouver National Park be?

(2) PERMEANCE: As any area in a watershed becomes more overlaid with impervious surfaces conveyance and storage mechanisms shift from sub-surface to superficial with most watersheds experiencing a lockstep numerical relation between watershed degradation and decreased permeability, especially where water quality is used as the integrated environmental indicator of ecosystem function. How this relationship can be altered by moving from mostly 'grey' storm water infrastructure to 'greener' storm water infrastructure is still not well understood. Surrey is slowly moving toward a water balance methodology in dealing with permeability but that alone will not be enough to ensure watershed improvement. We need a much improved riparian corridor, not just riparian setbacks.

(3) COMPARISON OF ROUGE AND LITTLE CAMPBELL RIVER WATERSHEDS:

Variables	**Rouge River**	**Little Campbell River**
Size	336 sq. km.	74.4 sq. km.
Discharge	1.76 cu. m/s	2.91 cu. m/s
Impervious watershed area	18%	14%
Protected area	62.9 sq. km (18.7%)	8.7 sq. km (11.6%)
Goal protected	79.1 sq. km (23.5%)	18.6 sq. km (25%)