Ecological Restoration Projects in Regional Parks
2022 WORK PLAN ELEMENTS

Markus Merkens
Natural Resource Management Specialist
Regional Parks Committee Meeting
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Ecological restoration contributes to maintaining the ecological health and resiliency of regional parks.
Regional Parks Ecological Restoration 2022

- Restoration Project
- Regional Park
- Regional Greenway
- Regional Park Reserve
- Ecological Conservancy Area

Map showing various locations and restoration projects within the regional parks.
West Area
AMPHIBIAN ENHANCEMENT

Capilano River Regional Park

Protect sensitive breeding habitat and enhance biodiversity
SHORELINE MANAGEMENT

Pacific Spirit Regional Park

- Effects of climate change accelerating shoreline erosion
- Revegetation of uplands and stabilization of slopes
Central Area
BURNS BOG 2016 WILDFIRE ZONE MANAGEMENT

- 2016 wildfire burned through 39 ha of peatland
- Opportunity to reduce forest cover to promote Sphagnum growth
COLONY FARM SHEEP PADDOCKS POND
East Area
CAMPBELL VALLEY REFORESTATION/HEDGEROW ENHANCEMENT
Campbell Valley Reforestation/Hedgerow Enhancement

- Hedgerows
- Forest Planting
- Old Fields
- Hay Fields
- Future Restoration Sites
KANAKA CREEK RIPARIAN RESTORATION
Thank-you – Questions?
PROCESS

2021
- Project Planning
- Regional Park Connectivity Research
- Park Connectivity Rating
- Case Study and Lit. Review
- Regional Park Travel Behavior Research
- Analysis & Conclusions
- Implementation

2022
- PART 1
- PART 2

2020

PART 1

PART 2

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Abstract

Introduction: Cycling behavior has recently attracted great research attention as an important type of physical activity and sustainable mode of transportation. In addition, cycling provides other environmental benefits, such as reducing air pollution and traffic congestion. Various built environment factors have been demonstrated to be associated with the popularity of cycling behaviors. However, the most recent built environment cycling reviews were conducted nearly 10 years ago, and these reviews reached no clear consensus on which built environment factors are associated with which domain of cycling behaviors. To determine the crucial features of a cycling-friendly city, it is therefore necessary to conduct a review based on empirical studies from the last decade (2007–2017).

Methods: Thirty-nine empirical studies published in peer-reviewed journals between 2007 and 2017 were retrieved and reviewed. The results were summarized based on built environment factors and four domains of cycling behaviors (transport, commuting, recreation, and general). Weighted elasticity values for built environment factors were calculated to estimate effect sizes.

Results: We found consistent associations with large effect sizes between street connectivity and cycling for commuting and transport. The presence of cycling paths and facilities was found to be positively associated with both commuting cycling and general cycling. However, the effects of land-use mix, availability of cycling paths to non-residential destinations, and terrain slope on cycling behaviors remained weak. The effects of urban density and other built environment factors are mixed.

Conclusions: This review has demonstrated that street connectivity and the presence of cycling paths and facilities are the two most significant built environment factors that may promote cycling behaviors. With the emergence of advanced measurement methods for both the built environment and cycling behaviors, further studies may overcome current research limitations and provide robust evidence to support urban planning and public-health practice.
LITERATURE REVIEW

- Significant general information on cycle network planning, route design, demand management & GHG benefits
- Little specific to promoting cycling to parks
- Key case studies suggest new routes increases local travel by bicycle
LITERATURE REVIEW

- Identified three examples of transit to parks needs assessments
- LA County transit to parks plan – leading example
- Park shuttles can fill gaps in transit system
- Local webpages and blogs share knowledge on transit travel to day hikes
**KEY INSIGHTS**

General Comments & Data

- Use of existing park visitation data
- Support for improvement to alt. transportation options
- Those without vehicles face barriers to park access
KEY INSIGHTS
Relative Transportation Connectivity & Visitor Travel Behavior

• Weak & inconsistent correlation

• Some factor(s) other than infrastructure connectivity involved in travel choice
KEY INSIGHTS
LA County Case Study

• Collaboration between parks and transit agencies key

• Type of experience / facilities offered in a park influences the likelihood a visitor will use transit to travel there
KEY INSIGHTS
Passenger Ferries

• Feasible passenger ferry service = right blend of geography, settlement and traffic congestion

• Metro Vancouver does not have this blend now
MOVING FORWARD
Regional Greenways 2050

• Advance incomplete portions of approved regional parks greenway corridors
• Support the Sea Island Greenway to Iona Beach Regional Park
• Complete the Burnaby Lake South greenway
• Advance planning for Delta Nature Reserve & Delta South Surrey Regional Greenway
MOVING FORWARD
Other Alternative Transportation Projects

- Promote alternative transportation use to parks
- Explore what motivates people to use alternative transportation
- Work with TransLink to improve transit to parks
- Plan for shuttles to Iona Beach and Widgeon Marsh regional parks
- Conduct passenger ferry study
- Support transportation solutions to Belcarra Regional Park