A Public Art Plan for the Expressive Potential of Utility Infrastructure

Prepared for the Utilities and Environmental Protection Department



Presented January 2007





TABLE OF CONTENTS

Section I Executive Summary	1
The UEP Public Art Plan Vision	2
The UEP Public Art Plan Mission	
The UEP Public Art Plan Guiding Principles	3
Section II Acknowledgements	5
Section III Statement of Purpose	7
Section IV Context	9
Landscape and Infrastructure	9
Place-Making and the Watershed Framework	10
The Role of the Artist and of Public Art: Interdisciplinary Actions within the Watershed	
Section V Projects	
Introduction	13
The Methodology of Site Selection	14
An Inventory of Diverse Public Art Opportunities	17
Section VI Community Involvement	49
UEP Curriculum Kit	
Artist Mentorship Program	
Mentorship Opportunities	
Artist Residency	51

Appendices

Appendix A	Public Art Program Supporting Documents
Appendix B	Imagine Art Here Workshop Notes
Appendix C	UEP Art Committee Terms of Reference
Appendix D	UEP Infrastructure
Appendix E	GIS and Developments in Recent Art



EXECUTIVE SUMMARY

The health and beauty of the Bow River watershed is, without a doubt, the result of the political and ethical fortitude of The City of Calgary. Through the careful stewardship of this precious resource over the years, Council and the Department of Utilities and Environmental Protection (UEP) have ensured a sustainable water supply for Calgary's evergrowing population and the protection of this unique urban river environment.

Council displayed similar foresight and progressive spirit when they adopted the Public Art Policy in early 2004. In accordance with the Public Art Policy, UEP opted to pool their percent for public art funds for the 2006-2010 capital infrastructure cycle, generating nearly \$6.9 million for public art, design, and related educational programming. Given the scope and complexity of this opportunity, it was decided that a visionary public art planning document was required to guide the expenditure of these funds in a strategic and comprehensive manner.

A vision, mission, and series of principles were developed collaboratively to guide the creation of the Plan and provide a focus for stakeholder implementation. A coherent series of public art projects and initiatives have also been identified that map the man-made watershed of UEP infrastructure, in conjunction with the extended watershed of the Bow River. These projects will create a visual and aesthetic legacy that will highlight UEP services and infrastructure, as well as Calgarians' impact upon the Bow River watershed. While the main focus of the Plan is to bring art into the mix of urban life in Calgary, these projects will also foster stewardship and educate the public about UEP services, infrastructure, and the surrounding watershed.

The public art resulting from the Plan will be rooted in the success of the lead project – the "Visual Language" for UEP. This project will set the context for all others to follow, as it will create a conceptual framework and visual tone for how UEP wants citizens to recognize and respond to its infrastructure. As a way of mapping the relationship between UEP infrastructure and the Bow River watershed, the Outfall Project is another significant project in the Plan. By marking the outflow points into the Bow River created by the hydrologic patterns of residential communities, this all-encompassing project will bring a community-wide understanding of the watershed and Calgary's footprint within it. The focus of all the projects in the Plan is to engage artists in dealing with water issues and

to utilize public art to raise awareness of water as a critical and finite resource. Both permanent and temporary projects will continuously engage and inform citizens of their relationship to the watershed, and create a strong identity for The City as an environmentally-conscious member of the community.

A framework for Community Involvement Strategies has been developed to support the implementation of the Plan. This includes the development of a Public Art Curriculum Kit, a living document which will continue to evolve over time and will be grounded by a Teacher Advisory Committee. The Community Involvement Strategies will also utilize the Public Art Program's Artist Mentorship initiative to engage local artists and encourage them in the development of public art practice in Calgary. A communications plan is currently being devised by Public Art Program staff.

The Plan takes a leading step in North America through its innovative and forward-thinking approach of integrating public art into utilities and environmental systems. The Plan also capitalizes on the City's excellent environmental record as steward of the Bow River. The art and infrastructure projects that are part of the Plan will enhance and preserve this legacy. As the projects are put into effect, they will position Calgary as a visionary city with regard to public art and infrastructure and environmental stewardship.

The UEP Public Art Plan Vision

The UEP Public Art Plan will foster a series of cohesive public art projects and events that relate specifically to Calgary's watershed and, particularly, to the Bow River. The beauty and function of these public art projects will encourage public interest, involvement, and education surrounding the public utilities and environmental services managed by UEP.

The Plan is founded on the principle that public art, in collaboration with other disciplines, can create remarkable places that encourage sustainability and stewardship of the environment. It will provide The City of Calgary and its citizens with an opportunity to tell a story about its origins, and to participate in the preservation of its most important and sustainable resource — the Bow River.

An important intention of the Plan is to integrate art into public infrastructure through interdisciplinary collaboration. The best artists — local, regional, national and international — will be commissioned for public art projects, attracted by unique opportunities ranging from large-

scale permanent installations to ephemeral projects on the Bow River. UEP's goal is to commission public art that is an integral part of Calgary's civic life.

The UEP Public Art Plan Mission

The UEP Public Art Plan will create distinctive places throughout the community while building awareness, appreciation and understanding of The City's commitment to the protection and long-term sustainability of its water supply and the vast ecologies which support it.

The UEP Public Art Plan Guiding Principles

- Articulates UEP's purpose through public art
- Fosters creativity and innovation
- Is community and site-oriented
- s developed in an open and informed atmosphere
- s ls designed for a diverse and ever-changing audience
- Connects Calgary to other Canadian cities and provinces
- Conveys a sense of urgency relating to water conservation, management and stewardship
- Is informed by, aligned with, and responsive to existing City of Calgary policies, strategies and plans
- Supports cross-departmental and cross-discipline collaboration
- Represents a significant portion of The City of Calgary Public Art Master Plan, and will be implemented in accordance with the Public Art Policy

Unless otherwise noted, all maps were prepared by CH2M HILL based on data provided by The City of Calgary.



Section II ACKNOWLEDGEMENTS

Dave Bronconnier, Mayor Council UEP Management and Staff UEP Public Art Plan Working Committee:

- S Paul Fesko, Manager Strategic Services, UEP
- Stacey Dyck, Public Art Program
- David Down, Centre City Planning
- « Kathleen Long, Engagement Resource Unit

UEP Public Art Committee:

- Nancy Stalker
- Boris Schurenko
- Mary Anne Rutherford
- Solution Diane Whitburn

Centre City Planning Interdepartmental Public Art Team Imagine Art Here Workshop Participants Public Art Board Imagine Calgary

Source: National Atlas of Canada 5th Edition. Geographical Services Directorate,Surveys and Mapping Branch Energy, Mines and Resources Canada, 1985

Public Art Board Imagine Calgary

JANUARY 2007



Section III STATEMENT OF PURPOSE

In 2005 The City of Calgary Public Art Program, in conjunction with the Department of Utilities and Environmental Protection (UEP), determined that, given the complex and often hidden nature of UEP infrastructure projects, a comprehensive public art plan was necessary to ensure the appropriate and strategic expenditure/investment of UEP public art dollars.

Public art plans are essential to ensure that our visual environment and identity are as deliberate and carefully considered as our civic infrastructure systems. A long-range, visionary approach to public art also provides a detailed procedural framework that is adaptable to our changing times, and upholds our commitment to partnerships and community involvement. It will result in lasting and meaningful public art projects and initiatives.

The UEP Public Art Plan (the Plan) is a key implementation vehicle for Council's "commitment to responsible environmental stewardship, and to decreasing the demands on our finite natural resources." Based on the notion that infrastructure functions best when it is beautiful as well as useful, the Plan goes beyond aesthetics, encompassing a broad spectrum of activities and approaches that will shape public places, advocate for change, and engage the community. The Plan will align with Imagine Calgary and represents a key component of the Public Art Program Master Plan.

The public art resulting from this unprecedented Plan will celebrate and communicate Calgary's civic values, history, and ambitions in relation to its immediate watershed. Calgary's great success in and sensitivity to ecological planning has resulted in an environment that is abundant with opportunities to use UEP infrastructure as a means of public expression. Implementation of the Plan will make a positive contribution to the visual landscape of the community while building awareness of UEP and its "invisible" services – both in the city centre and beyond.

Positioning the watershed as an organizing principle in developing the Plan has grounded the proposed projects and recommendations with a sense of purpose and clarity. It has proven to be a timely, sensible, and exciting approach, one that will continue to build on Calgary's reputation as both a major player in the international public art arena and as an innovative and influential city. We are pleased to submit these ground-breaking project opportunities as a new way of thinking about the important relationship between public art and infrastructure.

Via Partnership

- Semily Blumenfeld

Cliff Garten Studio

CH2M HILL

- Mark Crisp
- « Kathleen Ennis



Section IV

CONTEXT

What is a Watershed? It is "that area of land, a bounded hydrologic system, within which all living things are inextricably linked by their common water course and where, as humans settled, simple logic demanded that they become part of the community."

John Wesley Powell, explorer of the Colorado River, 1869

Landscape and Infrastructure

Though many North American cities grew, as Calgary did, because of their geographic relationship to a river, few of these cities enjoy a connection with a river whose ecosystem is as intact as the Bow River. A source of drinking water, recreation, and a world-class trout fishery, the Bow has long been the lifeblood of Calgary. Tucked into the foothills that roll out from the Rockies, the Bow River is a quiet, steady force in the landscape.

The Bow River and its watershed are resources cared for by many Canadian agencies. The City works closely with regional partners to address water quality, conservation, management, and watershed protection. The word "Protection" says a great deal about the intention and attitude of UEP and its goals. Mindful management of the riparian zones of the Bow and Elbow Rivers has left Calgary with an urban watershed whose main arm possesses many characteristics of a river within a much more rural setting. The cumulative effect of Calgary's continually improving environmental stewardship of the Bow and Elbow Rivers also contributes to the health of the watershed in general.

In Calgary, the idea of infrastructure has been tempered by our understanding of stewardship, efficiency, and cost-effective management. We do not normally think of infrastructure as beautiful; yet there is untapped potential in its forms to reveal and express how and why the city has grown. Pump stations, reservoirs, treatment plants, run off catchments, culverts and grates — all of these are charted in relationship to the natural watershed of the Bow River and to Calgary's social and economic needs. The positions of these natural and urban forces in the landscape are inextricably bound into a web of engineering, social desire, and the geology and hydrology of the watershed(s). The UEP Public Art Plan anticipates that the forms and processes of Calgary's water management infrastructure could be used for aesthetic expression and education in the coming decades.

Calgary has a unique urban position as the steward of a great Canadian River in an even greater Canadian landscape between the Bow Glacier, the city, and the larger downstream Canadian watershed. Developing an interesting and informative aesthetic expression for UEP and water infrastructure will send a message to the rest of North America and beyond that art can bring a greater civic awareness to infrastructure and water resources. Just as the communities and municipalities downriver benefit from Calgary's stewardship of the Bow River, the rest of Canada and the US can learn another way to connect to infrastructure and stewardship — through public art.

Place-Making and the Watershed Framework

Art installed as a singular event has always had and will continue to have its place in the city. However, the notion of art as a series of linked events — events that unfold and reveal the character of a place — is more suited to a public art plan for a City department whose influence ranges over the entire city and its infrastructure.

UEP is in charge of delivery systems for both fresh water and water effluents within Calgary's city limits. The context for this engineered and expansive system is the Bow River watershed, which is the "natural" system for delivery and discharge. By selecting the watershed as a model for thinking about the city, we immediately connect Calgary to the places beyond its boundaries. We make a statement about its geographic connectedness to the Bow Glacier at the headwaters of the Bow River and to other watersheds in Alberta and beyond to Hudson's Bay. UEP's infrastructure responds to the watershed and all of its functions by controlling Calgary's interactions with the landscape. The UEP Public Art Plan encompasses Calgary's watershed as well as the UEP infrastructure knitted into it. From the encompassing "Visual Language" and "Outfall" projects to the more place-specific Pearce Weir and Shepard Wetlands projects, the watershed connects our thinking to Calgary itself and provides inspiration for the artists who will activate the plan.

UEP public art projects will focus on the expressive potential of infrastructure. They will create distinctive places throughout the community, building public awareness of The City's commitment to the safety and long-term sustainability of our water supply.

The Role of the Artist and of Public Art: Interdisciplinary Actions within the Watershed

The outstanding qualities of the projects outlined in this Plan will encourage public interest, involvement, and education surrounding Calgary's public utilities and the environmental services managed by UEP. Interdisciplinary artist-led teams will work collaboratively to create an aesthetic for our infrastructure that encourages sustainability and stewardship of the environment. The plan will help to create new places along the river, places where art challenges us to think differently about Calgary and about the impact of our actions, both individually and collectively.

The artist's role in this endeavour is one of a civic and environmentallyminded provocateur. Through projects, both conceptual and built, artists' work will offer Calgarians a different window into their own rapidly changing urban landscape. And, like the Bow River, UEP public art will become an integral part of Calgary's civic life.



Section V

PROJECTS

Introduction

In the introduction to *The Bow: Living with a River*, author Gerald Conaty carefully outlines the historical context in which artists have been representing the Bow River since the mid-19th century.¹ Beginning with the development of the railroad, many European artists were commissioned to document the landscape and its developing communities in paintings and drawings. During the early 20th century,



Tom Thomson, *Spring Ice*, 1916 *The National Gallery of Canada, Ottawa*

the river valley became a sought-after artist retreat and source of inspiration for later work in the studio. In the 21st century, the Bow River continues to inspire new generations of artists. But that inspiration exists in the context of our responsibility to and stewardship of a physical environment that has been largely altered

through our actions over more than 100 years. With this plan, UEP is prepared to commission artists to work within the landscape to question our relationship to an environment in which the city is part of a remarkably healthy watershed.

The UEP Public Art Plan creates an opportunity to engage individuals and communities through public art that expresses the effects and unique qualities of the Bow and Elbow rivers, their watershed context, and their sensitivity to our actions in the present and the future.

Peter Von Tiesenhausen, *Duration*, 2000 *Glenmore Reservoir, Calgary, Commissioned by Calgary Waterworks*



¹ Ed. Gerald Conaty, *The Bow: Living with a River*, with essays by Daryl Betenia and Catherine Mastin. Glenbow Museum and Key Porter Books, 2004.

We often take for granted the infrastructure we rely on in our daily lives. The artwork proposed in this plan will create a compelling connection to UEP infrastructure and services that ultimately have an impact on the rivers we have settled around.

The goal of this section is to outline projects that contribute to community dialogue and make UEP systems visible. The intent is to help viewers see how they have an impact on ecological and built systems, and to show how these systems must work to be sustainable. The Public Art Program will draw on the talents of internationally and nationally recognized artists to create innovative public art infrastructure projects and nurture the capabilities of Calgary's thriving artistic community.

The UEP Public Art Plan is built on a number of cornerstones that, in order to achieve the cohesive vision of the Plan must be reflected and/or considered in all projects. They include:

- The watershed as the 'big idea'
- The work of Imagine Calgary
- The concept of a 'city within a river, and a river within a city'
- The opportunity to alter public perception about the river, the watershed and citizens' role within it
- The need for longevity of ideas
- The celebration of collective memory
- The Triple Bottom Line (social, economic and environmental impact)
- The concept of a fourth Bottom Line aesthetic sensibility

The Methodology of Site Selection

Background

To build on their knowledge of Calgary and of the watershed of the Bow and Elbow rivers, CH2M HILL was retained by Via Partnership and Cliff Garten Studio to participate in the Public Art Plan. Since CH2M HILL traditionally provides engineering consulting services to The City to design and construct infrastructure facilities, the project presented an opportunity for collaboration between engineering services and the development of a plan that focuses on the services and values of UEP. A critical aspect of this process is the importance of The City's commitment to environmental stewardship, as well as the emerging vision for a sustainable Calgary over the next century. CH2M HILL developed maps of various components of the city, ranging from roadways, rivers, and public open spaces to existing UEP infrastructure. This mapping process was completed in support of a site selection process done collaboratively with the UEP Public Art Plan Working Committee, various stakeholders, and other City departments, and through a workshop process held in April 2006. CH2M HILL developed the key maps using existing Geographic Information Systems (GIS) data provided by The City, and then developed mapping materials over aerial photography to identify and illustrate key sites.

Further information on GIS and the role it may play in the various projects associated with the Plan is provided in Appendix G.

Mapping

Multiple themes, such as rivers, parks, roads, and open spaces, were layered onto several base maps to provide orientation and illustrate the "pattern" or "grain" of the city. This work was completed over lowresolution aerial photography and later, when key sites were identified, on higher resolution photos. Several examples of these working maps used by the project team have been included. (Exhibits 9-14)

Site Selection Process

Exhibit 3 illustrates the site selection process for the Plan and identifies some of the drivers and approaches in developing the GIS materials. A site selection matrix was also prepared to identify and describe the key criteria for each candidate site. The use of the higher resolution aerial photographs allowed for a greater understanding of the site and its immediate context and contributed to the success of the *Imagine Art Here* workshop. These maps (Exhibits 15-21) are included with the Imagine Art Here notes in Appendix A of this document.

The sites were chosen with the following intentions:

- To connect the public to the river, either at its edge or remotely throughout the city
- To create an environment that allows all to see and think about the Bow and Elbow rivers, their context, and the larger scale of the watershed on which the city is dependent
- To connect the public to UEP's services and programs and to the essential goal of stewardship of water resources for the City
- To express this connection through thoughtfully designed infrastructure

To generate catalytic public art projects that provide the impetus for future work that continues the narrative aspect of the relationship and stewardship of the rivers and the watershed

Site Selection Criteria/Matrix

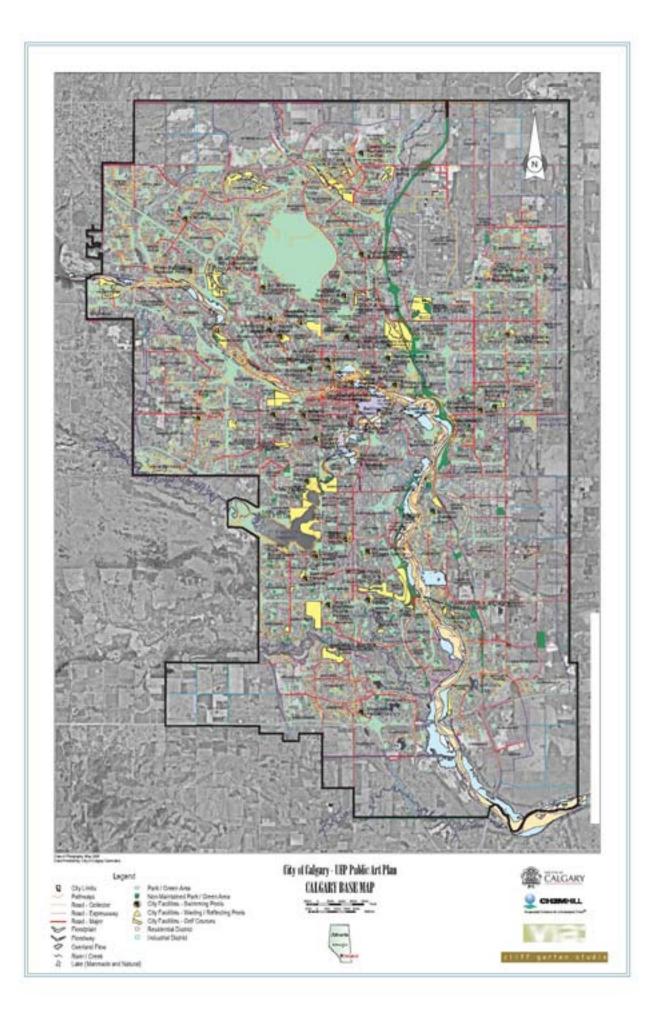
The Site Selection Matrix (Exhibit 4) was developed to provide a snapshot of the major criteria for each candidate site that was to be considered in the final Public Art Plan. This was developed in consultation with the UEP Public Art Plan Working Committee and forms part of the overall process toward selection of final projects. The working sites/projects were identified as follows:

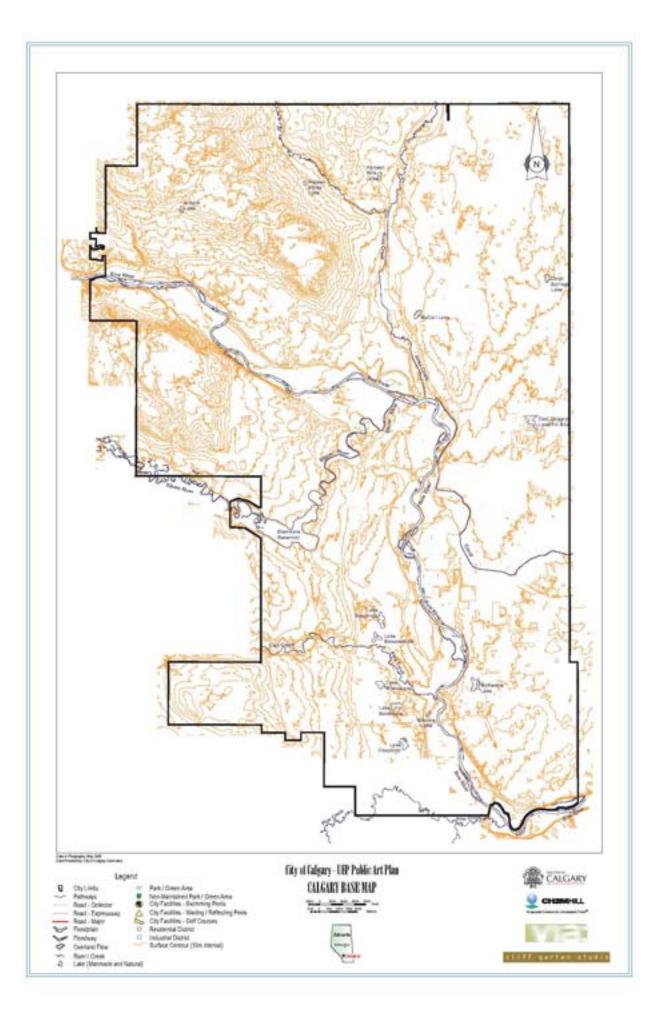
- 1. Edworthy Park
- 2. Memorial Drive Parkdale Blvd /3rd Avenue NW
- 3. Eau Claire, Centre City and the Beltline
- 4. Nose Creek at Laycock Park
- 5. Pearce Estate Park and Weir
- 6. UEP Water Centre Complex
- 7. Pine Creek Wastewater Treatment Plant
- 8. Shepard Legacy Park

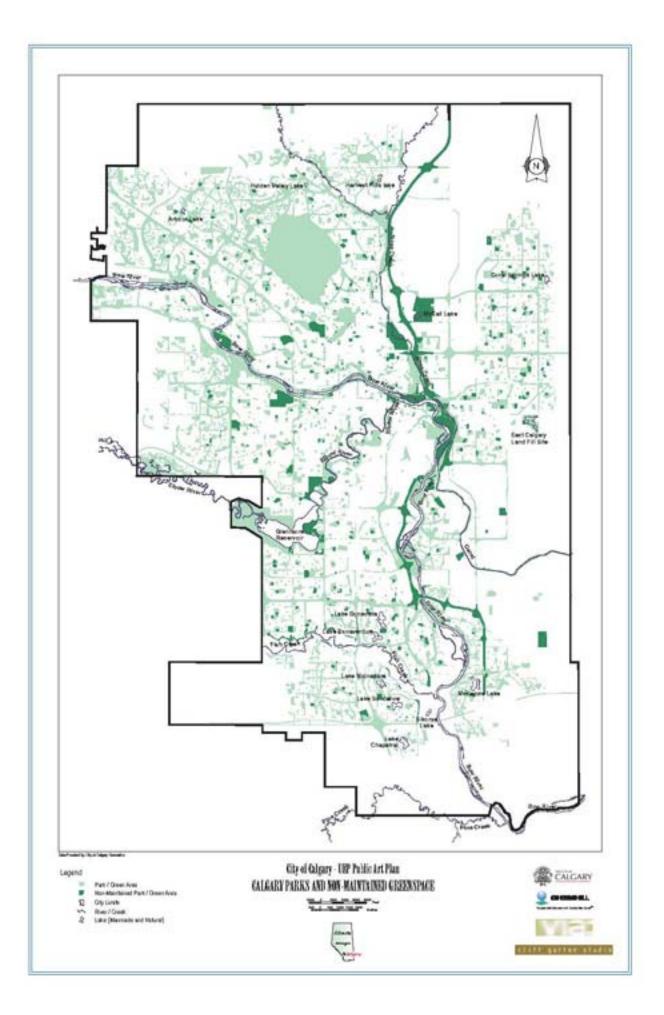
The following criteria were developed to provide an overview of each site's characteristics.

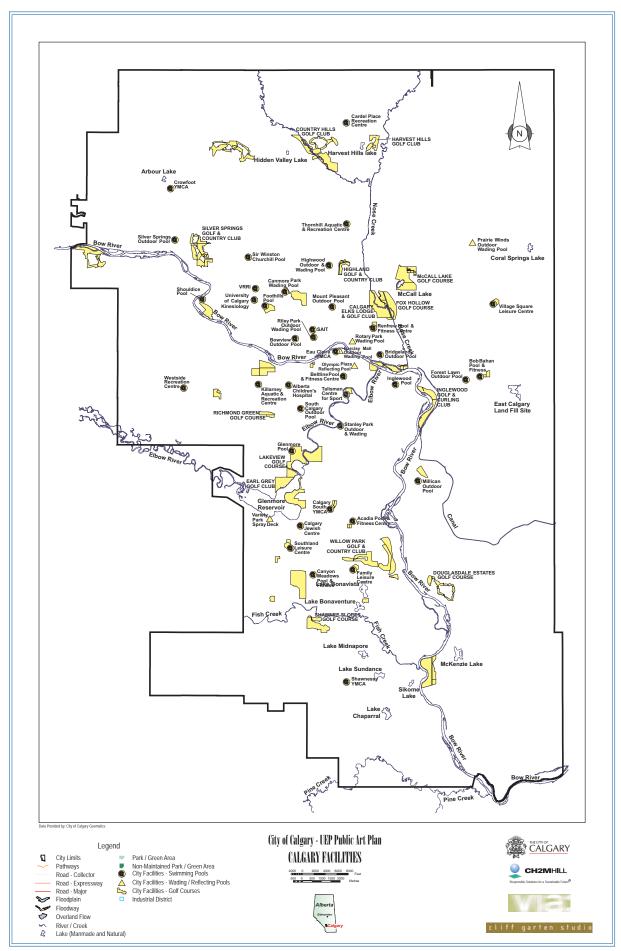
- General Description Provides information regarding location of site, adjacent areas, and general current/future uses
- Potential Constraints Provides information on issues that may need to be addressed on the site
- Accessibility Provides general information regarding current or proposed access to the site for vehicles and pedestrians
- Adjacency to UEP Infrastructure Identifies infrastructure related to the site where possible
- Solution Visibility Describes visibility of the site in relation to adjacent areas
- Potential Future Development Describes future development scenarios on and around the candidate site that may affect the project in the future (These issues may also be listed under constraints.)

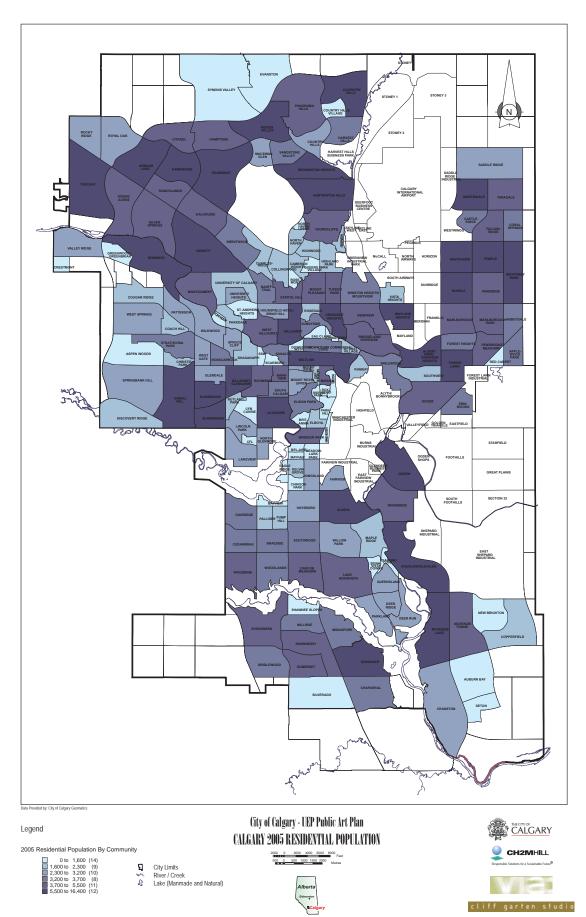
The matrix is intended to be a working tool for future public art site selection as the process evolves. In conjunction with this work, a master map has been prepared to illustrate the key sites identified in the project plan. (Exhibit 22)













UEP PUBLIC ART MASTER PLAN - SITE SELECTION PROCESS

DRIVERS FOR SITE SELECTION CORE THEMES AND OBJECTIVES

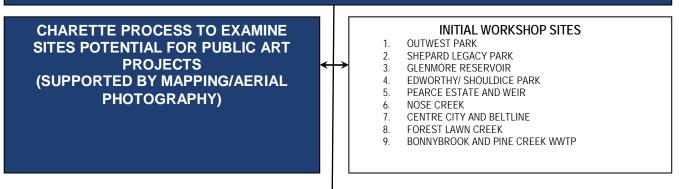
- BOW AND ELBOW RIVERS AS MAJOR ORGANIZATIONAL ELEMENTS
- METAPHOR OF RIVER UNIVERSAL MEANING TO ALL
- BECOMING A FOCAL POINT OR SYMBOL OF ENVIRONMENTAL STEWARDSHIP IS A PLACE OF GATHERING AND RECEIVER/ORIGINATOR OF CITY WATER AND RUNOFF.
- PROVIDES CONNECTION TO A MUCH LARGER WATERSHED CONTEXT
- OPPORTUNITY TO DEMONSTRATE AND ILLUSTRATE THE PROGRAMS AND SERVICES UEP
- PROVIDES SEVERAL LEVELS OF CONNECTIVITY FOR THE GENERAL PUBLIC AS A RECREATIONAL RESOURCE, UNDERSTANDING THE EFFECTS AND IMPACTS OF A CITY ON A RECEIVING BODY, FUTURE GROWTH.
- SITES ARE PART OF AN EXISTING/PROPOSED PROJECTS, HISTORICALLY SIGNIFICANT LOCATION, AND LARGE RECREATIONAL USE (THEREFORE –PUBLIC EXPOSURE). SITES ARE PART OF "INVISIBLE" NETWORK E.G. OUTFALLS, PUMP STATIONS, ETC. SIGNIFICANT VIEWS, CONNECTIONS WITH OTHER ACTIVITIES.
- OPPORTUNITY FOR SUSTAINABLE DEVELOPMENT THEMES TO BE COMMUNICATED
- INTEGRATION WITH LAND USE AND URBAN DESIGN OPPORTUNITIES UNDERWAY.

PREPARATION OF GIS BASEMAPS

SITE RECONNAISSANCE AND REVIEW AND SELECTION OF POTENTIAL CANIDATE SITES

CANDIDATE SITES SELECTED AS POTENTIAL CATALYTIC OPPORTUNITIES (DEVELOPMENT OF SITE SELECTION MATRIX)

INITIAL CANDIDATE SITES FOR DISCUSSION AT CHARETTE – "IMAGINE ART HERE" CONDUCTED APRIL 2006



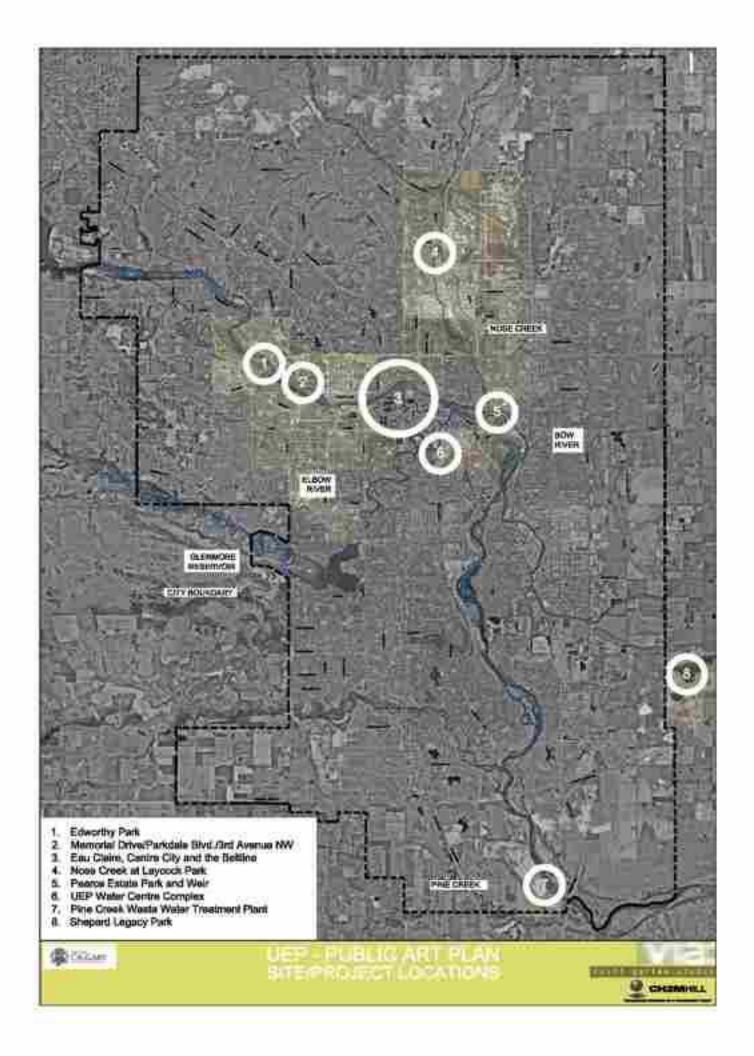
DEVELOPMENT OF FINAL SITES

PROPOSED SITES

- The Outfall Project Edworthy Park SW
- The Outfall Project Parkdale Blvd /3rd Avenue NW
- Prince's Island/Eau Claire River Edge SW
- Laycock Park NE
- Pearce Estate and Weir SE
- Shepard Wetland Legacy Park SE
- Pine Creek WWTP Landing Dock SE
- UEP Water Centre SE

CANDIDATE PROJECT/SITE	EDWORTHY PARK	MEMORIAL DRIVE/PARKDALE BLVD/3 RD AVENUE NW	EAU CLAIRE /CENTRE CITY/BELTLINE	NOSE CREEK AT LAYCOCK PARK	PEARCE ESTATE PARK AND WEIR	UEP WATER CENTRE	PINE CREEK WWTP BOAT LANDING DOCK	SHEPARD WETLAND LEGACY PARK AND INTERPRETIVE CENTER
LOCATION AND GENERAL DESCRIPTION								
	Located in the Southwest quadrant of the City located near Wildwood and Spruce Cliff Communities Located between the Bow River and CPR Rail line. Highly popular park connected with Douglas Fir Trail to the east. Pedestrian bridge provides access to the north bank of the river and regional trail running parallel to Memorial drive. There are well established recreational facilities on the site.	Located beside the Bow River near the intersection of Parkdale Ave and 3 rd Ave NW. Located in the Parkdale Community The site is near a site identified as part of the "Landscape of Memory" project recently developed by the City of Calgary Parks and multiple stakeholders to enhance Memorial Drive and its importance for remembering veterans. The site is located alongside the river and forms part of a natural bowl on the river edge. Located beside the regional pathway, connecting to the City Centre	Area primarily focused on River edge; bridge over lagoon and Prince's Island Park. Located north of the existing Eau Claire Market and Plaza. This is currently undergoing redesign.	64th Avenue NE at Deerfoot Trail along Nose Creek Adjacent to Nose creek Laycock Park is currently slated for the development of a constructed wetland. The site offers several family amenities including play and picnic areas.	1440 17A St. S.E. The land was donated by William Pearce in 1929 and now contained the Sam Livingston Fish Hatchery as well as several acres of wetlands, marshes, channels and ponds. The site is also located next to the Western Headworks Diversion Weir is located on the Bow River and functions to supply water to the Western Irrigation District (WID). http://content.calgary.ca/CCA/City +Hall/Business+Units/Parks/Parks +and+Locations/Natural+Environ ment+Parks/Locations/Natural+Ar eas+in+SE+Calgary/Pearce+Estat e+Park.htm Project is being developed in partnership with the Parks Foundation	The Water Centre is The City's latest and largest green building initiative. This facility has been strategically designed and constructed with the wellbeing of the environment — both natural and built — in mind. Much of what makes the Water Centre unique can be seen from any vantage point, inside and out. And still many more of the Centre's special features are integral, if invisible. Located on the Manchester site, at Spiller Road and 25 Avenue S.E., on land owned by The City of Calgary.	Located to the south of Calgary near the Deerfoot Trail bridge linking to Dunbow Road and Heritage Pointe Golf Course. The Pine Creek site is located on the north east corner of the Pine Creek Waste Water Treatment Plant site currently under construction. The proposed dock would likely connect to future Public Education Facilities proposed for the future as well as the future regional pathway along the Bow River. This site is well used by anglers and dog walkers and is a popular walking area for local residents of Heritage Pointe.	Located off 84 th Street SE Calgary "The Shepard Wetland Project is the first of three major regional park initiatives to provide park and open space amenities in future growth areas of Calgary. The Shepard wetland is part of an overall storm water management initiative to improve the quality of storm water entering the Bow Riverin conjunction with the storm water project, Calgary Parks is building a park that will highlight the environmental attributes provided by wetland environments while providing educational and recreational Opportunities adjacent to this facility. The Shepard Wetland Park will be home to the Shepard Environmental Education Ethics Centre (EEEC)." Pg 2 Vision – Report 2541 City of Calgary
	Existing uses on the site include playground, family picnic areas. Located near CPR Rail – Public Safety along railway and river edge will need to be addressed.	Public safety and accessibility. Located near residential street and therefore should be carefully designed to minimize impacts on local residents. Careful consideration of previous plans (Landscape of Memory) should be considered.	Future public art locations will have to consider future development of the Eau Claire Market Site and plaza.	Work in Coordination with future wetland development on site	A significant public safety issue due to the weir which is currently undergoing reconstruction to allow for some boat access (currently not permitted)	Public Art project currently underway with selected artist. Coordination with building design team will likely ongoing.	A fish habitat area had been identified further down stream as part of the Pine Creek WWTP project. All relevant Federal, Provincial and Local regulations regarding the Bow River will need to be addressed for this project. A gravel mining operation is also located adjacent to this site.	Critical site issues will include public safety in the wetland areas – the project is still under development and will require careful integration with program and site development.

CANDIDATE PROJECT/SITE	EDWORTHY PARK	MEMORIAL DRIVE/PARKDALE BLVD/3 RD AVENUE NW	EAU CLAIRE /CENTRE CITY/BELTLINE	NOSE CREEK AT LAYCOCK PARK	PEARCE ESTATE PARK AND WEIR	UEP WATER CENTRE	PINE CREEK WWTP BOAT LANDING DOCK	SHEPARD WETLAND LEGACY PARK AND INTERPRETIVE CENTER
	Highly accessible park by road (Bow Trail) and Regional Trail. Park visible from Sarcee Trail above.	Not accessible by physically challenged. Easy accessibility from regional trail.	Highly accessible and well used site. Used as a pedestrian link over the Bow River to Memorial Drive,	The site is accessible from 64 th Avenue NE with Parking located on 6 th St. NE	The site is readily accessible to the public with ample parking. It is adjacent to the existing Inglewood Bird	As an operational centre the building will have some security restrictions. Public tours will likely be conducted	The site is not easily accessible except to local residents and future employees of the WWTP. It is	Access to the site will be form 84 th Street SE and will be fully accessible.
			Kensington and Crescent Heights. Prince's Island is the site of major festivals and a popular restaurant.		Sanctuary further south. Access to the weir site is limited to the existing pathways and lookout currently in place.	once the building is completed.	likely that access will initially be from the river (river watch tours) Access currently via plant road through Gravel mining operation.	
	. Located adjacent to existing outfall on North Side of river. (B91+ B90,B89)	Located adjacent to Outfall B85	Located beside existing lagoon and weir.	Wetland to be developed for storm water management next to Nose Creek.	The weir is part of the Alberta Infrastructure system. There are also 11 wells dedicated to supplying water to the Fish hatchery located throughout the park.	Operations Centre for water treatment.	Located approximately 1.5 km from the WWTP outfall to the south.	The storm water wetland is being constructed as part of a larger management system (Forest Lawn Creek System)
	Potential for high visibility due to use of park	Opportunity to link with "Landscape of Memory" projects. Highly visible site along well used regional pathway.	Well used and popular sites ideal for public art work	Good visibility opportunities as the Nose Creek park and storm water systems are developed.	Visibility of the site will improve with the completion of the weir project which will allow boating access through the current system. Visibility from the Bow River will be a significant part of the public art project.	Will become a highly prominent site due to the innovative green architecture. Will be LEED certified.	Low visibility due to inaccessible site. River is approximately 7m below existing bank at this point. Best visibility form boat. Future development in and around this area will provide impetus for more access and visibility in the future	Highly visible site when completed – 50+ Acre Wetland system will be an attraction.
POTENTIAL FUTURE DEVELOPMENT								
	N/A	Future Development of "Landscape of Memory" Projects	Future redevelopment of the Eau Claire Market and Plaza – also potential impacts from Centre City	Future Wetland Construction	Proposed reconstruction of existing weir	N/A	Construction of WWTP scheduled for completion in 2007. Other projects may come on stream in near future including Public Education Centre.	Construction of site underway (2006) Other facilities to be added over time



An Inventory of Diverse Public Art Opportunities

City-Wide Projects

A. Visual Language for UEP: Understanding Our Place within the Watershed

UEP is embarking on a unique project to map and identify their infrastructure through an interdisciplinary public art project. An artist team will be commissioned to create a unified, iconographic or symbolic language that will identify infrastructure and educate users to the larger context of the natural watershed and the systems managed by UEP.

The artist-led team will be asked to create a visual strategy that encourages citizens to think of their relationship to water resources in an expanded manner. Through the creative use of literal and cognitive mapping, this graphic language will become part of the everyday vernacular and promote user recognition of UEP infrastructure and an awareness of the natural and man-made watershed. "From the glacier to the tap" and "from the roof to the river" may be ways of thinking about infrastructure and water resources

The Visual Language project is the cornerstone of UEP's Public Art Plan, in that it provides a cohesive and elegant system for UEP infrastructure. Through close collaboration with UEP staff, the Visual Language project team will provide a conceptual framework for UEP infrastructure, education, and all public art projects to follow.

When principles of design replicate principles of thought, the act of arranging [or recognizing] information becomes an act of insight.²

Scope of Work:

This is not a project for an individual artist, but one to be approached through an artist-led interdisciplinary team in close collaboration with UEP staff. The interdisciplinary team might also include an ecologist, a hydrologist, or a similar mix at the discretion of the candidate. Respondents should indicate a unique approach, not a standard graphic design plan.

The selected team will study and interact with UEP staff to form an understanding of Calgary's watershed, the environment, and UEP infrastructure. We imagine that this project would also include a resident

² Tufte, Edward, R., *Visual Explanations: Images and Quantities, Evidence and Narrative.* Graphics Press, Cheshire, CT, 1997. Introduction.

artist within UEP to serve as a liaison between UEP and the selected artist team.



Making the Invisible Stormwater Network Visible

The final deliverables include:

a) A graphic identity strategy for UEP infrastructure in the context of the watershed

 b) A strategy for expressing this language throughout the city as a way of influencing system-wide identity and public art projects to follow

The Visual Language project will relate to graphic principles, the physical forms for identifying UEP infrastructure, and increased public education regarding the water cycle, watershed, and water resources

usage in and around Calgary. The project is a response to how public art will integrate with infrastructure, and underscore the crucial issues of water ecology in the 21st Century.

Systems of UEP infrastructure that should be explored and explained through this project include:

- Water Services This includes all parts of municipal government that oversee water supply, stormwater, the wastewater system, water treatment plants and systems, watershed management.
- Waste and Recycling Services This includes all parts of municipal government that oversee waste collection and disposal, landfills, recycling, and composting.
- Land Information and Mapping The interdisciplinary design team may choose to work with this Business Unit of UEP to obtain a stronger understanding of Calgary's natural and built environment, and how City infrastructure intersects the watershed.
- Environmental Management This UEP Business Unit focuses on community sustainability strategies, environmental performance measures and reporting standards, and management and assessment of corporate environmental site contamination and liabilities.

The Visual Language vocabulary and its planned use should be adaptable to grow and evolve over time as the city continues to grow and the context and narrative of the watershed change. Goals:

- Communicate that the water system is not a disposal system
- Create a narrative of the watershed and water cycle for an awareness of UEP services throughout the city
- Make explicit the overlay of the man-made watershed on the natural watershed, recognizing that the watershed has no political boundaries
- Foster stewardship of the natural watershed by creating the opportunity to understand our daily impact on it
- Enhance the security of infrastructure by identifying it. Pump stations and other UEP infrastructure are identified only by signage providing their street address (for fire and emergency purposes). When residents are aware of "what that building is," they might be more likely to report unusual activity around it.
- Expand our consciousness of UEP infrastructure in relationship to the watershed and our limited natural resources

Objectives:

- Create symbols that embody the physical processes of water and the water cycle
- Create graphic images that are strong enough to embody messages concerning public use and sustainability, and suitable for a school curriculum
- Convey the fundamental message that Calgarians' relationship to UEP services is, first and foremost, a relationship to their watershed
- Include an artist residency component to benefit the artist team
- Work with the City of Calgary's *engage!* framework for public consultation

Budget:

\$150,000 design fee, based on 4-5 months of work devoted to research and discussions with UEP, creation of the UEP Visual Language, investigating and designing for individual sites, researching materials, reporting, findings, including design documents for fabrication, and an implementation strategy. UEP will allocate additional funding to implement the Visual Language once agreement is reached on the implementation strategy.

Timeline:

The artist selection process should commence upon adoption of the Plan, as this project will inform other UEP public art projects contained within the Plan.

Artist Selection:

"Call to Artists" seeking artist-led teams with previous experience in developing complex systems and/or organizational challenges relating to unlimited site possibilities. Teams will be judged on the overall interdisciplinary approach and innovative thinking applied to the issues in the Call. The team will be selected through the Public Art Program artist selection process and include interviews and review of professional references.

Community Engagement:

The team may be asked to organize internal and external focus groups to gain a better understanding of the community's knowledge of UEP infrastructure and how they currently identify with it.

Many related projects and programs are underway in Calgary. The Visual Language may have an impact on these or, conversely, these projects might influence the shape and form of the iconography. The selected team should reference the following projects and organizations, among others, when preparing their concepts:

- Yellow Fish Road
- Stream of Dreams
- River Watch
- Evergreen Theatre
- Calgary Board of Education
- Calgary Catholic School Board

B. The Outfall Project

Recognizing that watersheds have no political boundaries, the Outfall project is a vision of how we might creatively map our interactions within the watershed we inhabit. Calgary's many neighbourhoods link themselves to the Bow River, forming a network of connections between individual action and the river, and mediated by UEP infrastructure. The Outfall project is a way of depicting those connections to highlight the importance of watershed sustainability at both the local and global level. Because of its relationship to one of UEP's existing systems and the fabric of the city, the project is second in importance to the Visual Language project.

With more than 300 stormwater outfalls situated throughout the city, UEP has the opportunity to create a project that celebrates the relationship between Bow River ecology, urban activity, and water quality. The outfalls are the exit points for stormwater run-off gathered through the underground network of pipes to the river, and they are connected to the personal activities of virtually every citizen who returns water to the river through this system. UEP should commission an artist to consider the treatment of these stormwater outfalls to provide points of education on sustainability throughout the city. After the Visual Language, this project is the most pervasive in the Plan and, thus, the most visible. As the project evolves over many years, the treatment of the Outfalls should speak about infrastructure of the Bow River watershed and how it is connected to the greater watershed of the Saskatchewan River Basin.

UEP has received positive response from citizens regarding the newer outfall designs in developing areas of the city. Passersby are noting the presence of the outfalls and appreciate that aesthetics have been considered in their design. This would indicate that, in developing the design of the outfalls, the selected artist should consider three different types of opportunities:

- 1. Outfalls that have high visibility from the Regional Pathway system and can be viewed at eye level
- 2. Outfalls with high visibility in newly-developed areas
- 3. Outfalls with "place-making" opportunities adjacent to their location (Several of these opportunities are described in this section as individual sites. For instance, the outfall along Memorial Drive at Parkdale, which has good views to the Douglas Fir Trail and to downtown, has been singled out as possible ceremonial site in the Landscape of Memory plan.)

Scope of Work:

UEP will select an artist each year to design and fabricate five outfalls. The five selected outfalls will have a relationship to one another that can be defined by the selected artist in conjunction with UEP staff. This artist will be charged with working with UEP to identify outfall sites with high visibility that will help to share the mission of UEP. Through discussions with UEP, the selected artist will determine the best candidate sites for these projects. The outfalls need not all be the same, but there must be an element within the design that unifies the outflow system.

The selected artist will reference the Visual Language and continue to develop a consistent message that will be conveyed through the design of these outfall sites. We imagine that this project will also include the resident artist who has participated in the development of the Visual Language to act as liaison between UEP and the selected artist. Criteria for selecting outfall sites may include:

- The outfall needs to be redone in any case.
- The visibility is high from across the river or from above by pedestrians.
- The neighbouring community will benefit from the treatment of the site.

Goals:

- Foster stewardship of the natural watershed, by creating opportunities to understand how individual actions impact UEP systems and watershed quality on a daily basis
- Communicate that the water system is not a disposal system, and that our actions have an impact on those who live downstream
- Make explicit the overlay of the man-made watershed on the natural watershed, recognizing that the watershed has no political boundaries.
- Inform Calgarians about how storm and sanitary systems work (As UEP's current education programs focus on water conservation, awareness of stormwater and sanitary systems is very low.)
- Work with The City of Calgary's *engage!* framework for public consultation

Budget:

The budget for this four-year plan allows for the treatment of five outfalls each year.

Artist Selection:

An Open Call will be issued to artists. The artist will be selected through the Public Art Program artist selection process, which will include interviews and a review of professional references.

Community Engagement:

The level of community engagement will depend on the community in which the Outfall Project is situated. It is recommended that the selection criteria include location in a strong community that will benefit from the treatment of the site.

Artists should become familiar with the Yellow Fish Road Program cosponsored by UEP. This program engages school groups and community groups in hands-on involvement of stormwater management. Evaluation tools are expanding for the tracking of water quality improvement. Further engagement of these groups should be considered.

See

www.calgary.ca/portal/server.pt/gateway/PTARGS_0_2_400295_0_0_18 /Yellow+Fish+Road+Program.htm .

The artist will be required to participate in the community engagement process and, in some cases, generate engagement strategies through the public art project for implementation.

There are sites throughout the watershed where the outfalls are visible from both the land and the water, and have the potential to become gathering places between the river and the city. Highlighting these places would create a visible rhythm or a cohesive chain of events throughout the city. Sites that have been singled out for treatment as public art sites in this Plan are the Parkdale site along Memorial Drive and within Edworthy Park, where the outfall sites coincide with significant views of the Bow.

Permanent Projects

1. Edworthy Park



Edworthy Park acts as the western gateway to the watershed of the Bow River. It welcomes a very intimate relationship to the watershed, as it offers visitors the opportunity to experience the water beneath the grandeur of large, old stands of trees. The park has one of the highest walk-in use rates of all City of Calgary Parks.³ A public art project that will capitalize on the pedestrian opportunities within the park, offering repeat users new experiences each time they visit, will capture the imagination of the community. The Douglas Fir Trail inspires a sense of reverence for the ecological history of the site, while references to tipi rings hearken to the social importance of the park in Calgary's development. Edworthy is also a connecting point along the river valley park system, linking Shouldice Park and the Lawrey Gardens, which has one of the lowest walk-in rates in the park system.⁴

Scope of Work:

It is recommended that an artist is commissioned to develop a series of smaller installations that will enhance the pedestrian experience along the trails connecting the parks in the southwest sector of Calgary. These projects may take the form of interpretive materials, seating, trail markers, or cairns. The projects should act as gems to be discovered along a journey, like a series of breadcrumbs to mark a chosen path. Works should be situated at points along the trails with views to the river and in locations where it is possible to touch the water, emphasizing the connection to the watershed. These projects should be inspired by this intimate connection to the river.

Goals:

- Create the narrative context for the ecological and social history of Calgary
- Foster stewardship of the natural watershed, by creating the opportunity to experience it up close in an intimate setting
- Solution Enhance the organic, naturalistic experience within the park
- Work with The City of Calgary's *engage!* framework for public consultation

Budget:

Budget for the design, fabrication, and installation of a series of sculptures over a 1.6 km distance along the Regional Pathway will be included in the next capital budget cycle.

³ Noted in Open Space Strategy for Established Communities: Background Report – 2006, p. 62

⁴ ibid., p. 63

Timeline:

As Parks implements planned capital improvements, the project should occur concurrently.

Artist Selection:

An Open Call to artists will be issued. The artist will be selected through the Public Art Program artist selection process, which will include interviews and review of professional references.

Potential Partners:

City of Calgary Parks

Community Engagement:

The artist will be required to participate in the community engagement process and, in some cases, generate engagement strategies through the public art project for implementation.

2.

Memorial Drive/Parkdale Site



With its commanding view of the river, this site offers an opportunity to witness the force of seasonal stormwater outfall as it replaces water into the river. It is also significant because of the history of commemoration through the planting on Memorial Drive. The Memorial Drive corridor is a major thoroughfare in Calgary's road network. It is also a unique landscape that is shaped by an understanding of its social and physical role, and by a deep respect for its commemorative history. Integral to this vision is a landscape that is supportive, safe, accessible, and active, and

is enriched by a unifying identity, trees, and meaningful places to observe individual and collective memory. 5

Scope of Work:

An artist will be commissioned to create an opportunity to provide access to the Bow River while setting up a situation to view and/or harness the power of the stormwater as it reenters the Bow.

Goals:

- Support the vision of the Landscape of Memory Plan
- Create the opportunity to draw a connection between the river and the neighbourhood that uses the outfall
- Capitalize on the views to the east of Centre City and to the west toward the Douglas Fir Trail
- Create a gathering place for the neighbourhood and regional pathway users
- Create a place for community ceremony
- Work with The City of Calgary's *engage!* framework for public consultation

Budget:

\$60,000 CAN, excluding GST, for input into overall conceptual design, further definition/description/goals of the project and schematic design. This budget would include travel, insurance and artist expenses. UEP will allocate additional funding to implement the design once the design team agrees on the public art implementation strategy.

Timeline:

This project should occur when City of Calgary Parks is ready to begin implementation.

Artist Selection:

An artist will be selected upon the decision to build out this area. The selected artist must have the capabilities to lead a design team for the design and development of this component of the Landscape of Memory Plan. The artist will be selected through the Public Art Program artist selection process, which will include interviews and a review of professional references.

⁵ *Memorial Drive: The Landscape of Memory*, The public visioning program for Memorial Drive, prepared for Calgary Parks, by The Co-Design Group and Stantec, June, 2004.

Potential Partners:

City of Calgary Parks, stakeholders as identified in the Landscape of Memory Planning process.

Community Engagement:

Community engagement will be conducted as a part of the overall capital project community engagement strategy, with special emphasis placed on coordinating with Parks in relation to the Landscape of Memory plans and findings.

3.

Prince's Island/Eau Claire (River's Edge)



Several sites around Prince's Island Park are possibilities for public art. The bridge connecting Prince's Island to Memorial Drive and the neighbourhood beyond is an opportunity for an artist-designed bridge. The island itself is valuable open space for the City, and could feature a series of specific sites for public art where visitors could sit or interact with the river's edge. Lastly, the most important opportunity exists with reference to Eau Claire Plaza and the island's connection to the northern rim of the downtown core. The areas opposite the bridge on the north and south side of the lagoon have great potential for a public art statement which terminates the movement of the city northward and the northern edge of Eau Claire Plaza. If there is to be a large public art statement downtown, this terminus is an obvious site. The imminent plans for the rebuilding of Eau Claire Plaza and the type of plan adopted are key to understanding the type of public art statement that is appropriate for this site. Therefore, it is recommended that plans for such a terminus wait for the final plan of Eau Claire Plaza.

Scope of Work:

Once the design of Eau Claire Plaza is determined, additional site planning should be done in response. With a final site, an artist should be commissioned to create a large-scale iconic work that acts as a terminus to Eau Claire Plaza and a connection to Prince's Island. It is highly recommended that the piece deal with water conservation.

Goals:

- Create a clear statement about Calgary's development on the Bow
- Work with The City of Calgary's *engage!* framework for public consultation

Budget:

\$40,000 set aside for artist selection in fall 2010. Project budget to be determined as a part of the next capital budget cycle.

Timeline:

Dependent upon adoption of final plan for Eau Claire Plaza

Artist Selection:

Open competition. Short-listed artists will develop proposals prior to final selection.

Potential Partners:

City of Calgary Parks

Centre City Planning team

Corporate Properties

Eau Claire Plaza Design Team

Harvard Development

Princes Island Park Management Advisory Committee (PIPMAC)

Community Engagement:

- Stakeholders will be involved throughout the development of the project.
- Community engagement will be conducted as a part of the overall capital project community engagement strategy.

Laycock Park Wetlands Creation Project



64th Avenue NE at Deerfoot Trail along Nose Creek

The City will carry out a number of riparian wetland restoration projects for Nose Creek, and the associated riparian areas in Laycock Park, as part of the *No Net Loss Policy of the Calgary Wetland Conservation Plan.* Currently, a feasibility assessment is being conducted to ascertain appropriate locations and restoration activities suitable for the Nose Creek corridor.

There is also a need to evaluate the feasibility of improving the quality of stormwater entering Nose Creek. In 2005, City Council approved a Stormwater Management Strategy for better managing stormwater within the city. One of the objectives of the strategy is to retrofit the existing storm sewer systems with end-of-pipe sediment basins to help reduce the sediment loading to the river systems.

This riparian wetland restoration project is the first compensation project by The City under the Wetlands Compensation Policy adopted by Council (May 2004). As a pilot project, the opportunity to integrate public art as part of the aesthetic and educational programming in the Park is significant.

Nose Creek

Nose Creek is a tributary to the Bow River, arising just north of Crossfield and flowing into the Bow River just downstream of the Calgary Zoo. The eastern watershed boundary is just to the east of Deerfoot Trail and Highway 2. West Nose Creek is a major tributary that extends the western watershed boundary to about Bearspaw Road (Range Road 30).

4.

Historically, the creek had large meanders throughout the valley floor. During the mid-20th century, within the city limits, the creek was channelled to accommodate increased development and transportation requirements. Channelling the creek has caused scouring, erosion, and down-cutting.

The Nose Creek watershed has come under increasing pressure over the past few years as activities such as agriculture and urban development in surrounding areas have become more intense. Because political boundaries do not follow the watershed boundaries, an intermunicipal committee (Nose Creek Watershed Partnership) was established for the long-term protection and enhancement of the watershed.

Scope of Work:

An artist will be selected to work on the design team for the wetlands restoration and to design the Outfall openings for outfall N31 and possibly outfalls N30B and N30C. This project will provide Calgarians with a better understanding of the current condition of Nose Creek, its history, the impact of urbanization, and opportunities for stewardship of the creek and its watershed.

Goals:

- Develop wetlands and riparian restoration activities
- Develop a bio-system for bank stabilization
- Provide opportunities for community education about wetlands and riparian restoration
- Ensure that public art elements relate to each other and provide an aesthetic sensibility which reflects the Nose Creek environment.
- Work with The City of Calgary's *engage!* framework for public consultation

Budget:

\$200,000 for design team work and potential project relating to bank stabilization and/or renovation of the pedestrian bridge over Nose Creek

Timeline:

An artist will be selected to begin work in early 2007. Timelines for design, fabrication, and installation of the public art will be integrated into the capital project construction schedule.

Artist Selection:

An Open Call to artists will be issued, seeking artists with experience in bioengineering and/or wetlands design. The artist will be selected through the Public Art Program artist selection process, which will include interviews and a review of professional references.

Potential Partners:

Trout Unlimited

City of Calgary Parks

Nose Creek Watershed Partnership

Surrounding communities

Community Engagement:

Community engagement will be conducted as a part of the overall capital project community engagement strategy. The artist will be required to participate in the community engagement process and generate engagement strategies through the public art component for implementation. Once the project is complete, the artist should visit neighbouring schools to discuss the purpose of the work in the park and the role of the artist in the environment.

Pearce Estate Park and Weir



The Bow River is marked by a series of bridges and structures that have been constructed as Calgary has grown. These structures provide opportunities to involve the river, and UEP's key messages, as an aesthetic experience.

5.

The weir at Pearce Estate Park marks the river in a different way. The Western Headworks Weir is situated where the river turns to the south, flowing parallel to Deerfoot Trail. This structure is unique in the river system as it marks a point where boats can no longer navigate the waters due to the danger of the weir system. Access is allowed again further down river, in calmer waters. This point is also significant because it provides the headwaters to the Western Irrigation District (WID) for agricultural use throughout southern Alberta. The weir is currently under redesign (as the Harvie Passage) and will be developed to provide safe access for boaters while maintaining its current function for the WID. There are compelling views here that would provide an opportunity for a significant public art project. These include the views to the overlook structure on the west side of the river connected to Pearce Estate Park, to the Sam Livingston Fish Hatchery, and to the regional pathway network from Deerfoot Trail.

As the danger of the weir is being removed and recreational opportunities increase in the area, the aesthetics of the overall site should be reconsidered as a new landmark in the community. The overlook is the most visible architectural feature and should be reconsidered when other work is being done in the riparian zone.

Scope of Work:

The artist(s) will be engaged to work as a member of the engineering and facility design team to focus on redesign of the existing overlook, as indicated on the aerial photograph at Pearce Weir and if possible, all inriver components. It is understood that these features have already been engineered, but the opportunity to include an artist without altering the functional nature should be explored.

The design team will be charged with developing a conceptual design of the existing overlook in coordination with current work being developed for the Pearce Weir project. This approach will also include an understanding and integration with the existing Pearce Estate Park, Sam Livingston Fish Hatchery Facilities, and the wetland system in place. The following elements will be considered under this scope of work:

- The existing concrete overlook structure, stairs, and site grading
- The existing river edge wall structure below the existing outlook in coordination with engineering and hydraulic parameters of the current redesign
- Groins, assuming their present function and engineering
- The river's edge below the overlook, considering new user groups wanting access at this point

- Signage, pathway, and site furnishing opportunities leading to the outlook structure site and throughout the existing Pearce Estate Property where appropriate
- Integration of Pearce Estate Park and Sam Livingston Fish Hatchery facilities

The artist on the design team will work to visually enhance the site with reference to water quality issues, Pearce Estate, the history of the area now known as Harvie Passage, existing views, and recreational activity.

This project provides a good mentorship opportunity for a design team experience.

Conceptual design will include ideas for mitigation of the riparian zone and a rendering and/or a physical model of the overlook area.

Goals:

- Create a work of art that grows from the design of the Pearce Weir area and is integral to the form and function
- Articulate the interrelationship between each portion of the project weir, overlook, river improvements, and connection to Pearce Estate Park and the Sam Livingston Fish Hatchery (Through this design process, the design team will identify opportunities for public art.)
- Highlight the weir site views and water quality issues at this vital spot in the Bow River
- Work with The City of Calgary's *engage!* framework for public consultation

Estimated Budget:

\$60,000, excluding GST, for input into overall conceptual design, further definition/description/goals for the above-identified features and schematic design of the overlook area. This budget would include travel, insurance, and all artist and project design expenses.

UEP will allocate additional funding to implement the design once the design team agrees on the public art implementation program.

Timeline:

Begin 2007

Artist Selection:

The artist will be selected through the Public Art Program artist selection process, which will include interviews and review of professional references.

Partners:

Alberta Infrastructure

Alberta Environment

City of Calgary Parks

Parks Foundation Calgary

Bow River Habitat

River Valleys Committee

Surrounding communities

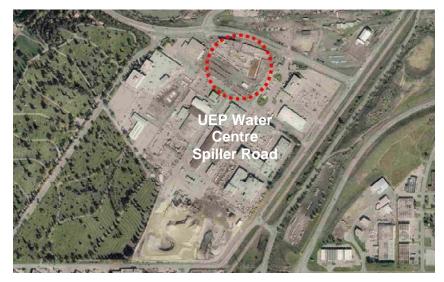
User groups

See the project website for all current information on the project <u>www.harviepassage.ca</u>

Community Engagement:

Community engagement will be conducted as a part of the overall capital project community engagement strategy. The artist will be required to participate in the community engagement process and possibly generate engagement strategies for implementation.

UEP Water Centre Complex– Spiller Road



The City of Calgary UEP Water Centre Complex has been designed to create minimal impact on the environment by using less energy, minimizing water use, using recycled materials wherever possible,

6.

creating less waste, and providing a healthy and dynamic working environment for City employees.

Various environmental elements will be incorporated into the building, including the use of natural light to reduce electrical energy costs, operable windows to allow fresh air into the building, plumbing fixtures to reduce water consumption and save in water costs, plus natural landscaping and the recovery of water from the roof for irrigation use.

The site landscape introduces an aesthetic of the prairie to the city. Conventional, manicured, and irrigated turf lawns will be installed in higher traffic areas to complement the more rustic but diverse look of prairie plantings.

Scope of Work:

The intent of the public art project is to illustrate the rainfall harvest cycle on the Water Centre site, focusing on three elements within the exterior garden area:

- 1. Snow fence that collects and directs run-off to the retention ponds
- 2. Daylighting the rainwater from the roof/rainwater leaders to allow above ground flow to the ponds
- 3. Highlighting the cistern/ area surrounding the cistern

Goal: The focus is a prairie garden on the south side of the building with niches of prairie perennial displays, tall and short prairie grass, and emergent moist area plantings. The area will create a beautiful and functional garden. The public art should integrate with these goals and the site itself — and illustrate the subtle relationship between water and the site.

Budget:

\$275,000

Timeline:

Ongoing to spring 2007

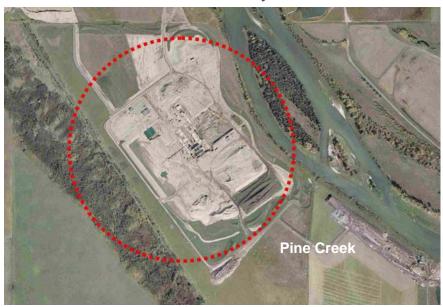
Artist Selection:

Limited selection from the Public Art Program Artist Roster

Community Engagement:

- Community representation on the selection panel (jury)
- Artist lecture
- Community Open House

7.



Pine Creek Wastewater Treatment Facility

The purpose of the Pine Creek Wastewater Treatment Facility is to meet the immediate need to provide additional wastewater treatment capacity for Calgary and surrounding area residents. The Pine Creek site is strategically located to support current and future growth for Calgary and the surrounding area.

The approach to landscape and site design at the site is based on the predominant use of native vegetation and the proposed implementation of large areas of landscape rehabilitation using reforestation techniques. These large areas are typically landscape buffers around and in between the plant, laid out in naturally occurring patterns found elsewhere along the river valley. As surrounding communities develop and the regional pathway extends past the plant site, the maturity and pattern of the landscape will become more important in maintaining the visual quality of the river valley and integrity of the environment.

A major goal for the site design has been the integration of architecture with the landscape. This approach will greatly enhance the visual character and impact of the site over the long term, but will also provide a significant departure from the traditional layout of a wastewater treatment plant.

It is a City mandate that the river valley develop as a continuation of the city's corridor along the Bow River, Elbow River, and Fish Creek Provincial Park. Therefore, public paths will form part of the site directly adjacent to the facility. In the future, the Pine Creek site will see the development of wetlands and an education centre dealing with

wastewater treatment processes and river valley concerns and protection. As part of this education centre, a boat landing is proposed which will be used by Alberta RiverWatch field trips. See www.riverwatch.ab.ca.

Scope of Work:

An artist will be commissioned to lead a design effort in developing a boat landing at the northwest corner of the site. This would also act as an entry node into the proposed regional trail system that will eventually be built along the river.

There may also be opportunities to develop other structures through the site once there is critical mass of development and connections to other parts of the city. This would be an isolated experience, except for local residents walking their dogs and fishing.

Goals:

- Reflect the values and design approach of the original site plan as laid out
- Provide an illustrative space that talks about the treatment of wastewater and the concept of the plant itself, as the public education building initially planned for the site will not be in place immediately
- As set forth by the site planners, the landscape will provide an environmentally-sensitive, natural context for the facility, and will complement the architectural and engineering elements of the site. The following goals stated in the Pine Creek Master Plan should also apply to the design of the boat landing:
- It will be aesthetically pleasing, providing enjoyment, stimulation, and education to workers, visitors, and other users of the site.
- It will be an ecologically functioning, naturally planted landscape, providing stormwater treatment and improved river edge protection.
 Using earthworks and considerable plantings, it will be designed to reduce the visual impact of the facility on surrounding areas.
- Access to the river edge will be maintained and enhanced, and persons with differing physical abilities will be accommodated.
- A well-connected trail system throughout portions of the site will be developed over the long term, and will connect to future development where feasible.
- Educational/interpretive opportunities will be explored and developed as appropriate

- A Plantings and earthworks will mitigate the visual impact of the development.
- The environment, including aquatic and terrestrial resources, will be protected and, where possible, enhanced during and after the development of the plant.
- Landscapes will be used to improve the energy efficiency of buildings.
- Work with The City of Calgary's *engage!* framework for public consultation

Budget:

\$60,000 CAN, excluding GST, for input into overall conceptual design, further definition/description/goals of the project and schematic design of the boat landing. This budget would include travel, insurance, and artist expenses.

As the conceptual work is completed and an understanding is reached as to what can be included in baseline construction documents, UEP will allocate additional funding to implement the design once the design team agrees on the public art implementation program.

Timeline:

2009/2010

Artist Selection:

The Program will seek artists who have experience in leading design teams and who have worked on projects that have in-water components. The artist will be selected through the Public Art Program artist selection process, which will include interviews and a review of professional references.

Potential Partners:

Alberta RiverWatch

Bow Basin Council

Trout Unlimited

Local developers

Community Engagement:

The artist will be required to participate in the community engagement process and possibly generate engagement strategies for implementation. Students and teachers who have participated in the RiverWatch program should be involved in a focus group with the selected design team to ensure that the function and design will be appropriate to the curriculum.

Shepard Wetland Legacy Park

8.



City of Calgary Water Resources and Corporate Properties Business Units are implementing the Shepard Stormwater Diversion Project. As part of an overall storm water management program, the Shepard Diversion Project was developed to control and enhance the quantity of surface run-off from a large area of eastern Calgary that currently discharges to the Western Head-works Canal. Run-off from this area of east Calgary will be intercepted and diverted through the Shepard constructed wetland system, which will improve the quality of stormwater before it is discharged to the Bow River. The constructed wetlands area will be largely inaccessible to the public.

A Legacy Park developed within the constructed wetlands will incorporate a range of facilities and activities, including an Environmental Education Ethics Centre (EEEC), learning gardens, weather station, wetland study stations, and wetland viewing areas. Public art within the park will help to illustrate our watershed, the water cycle process, and stormwater management.

Scope of Work:

Public art opportunities will focus on areas where the input of an artist(s) will have significant impact on the enhancement of educational programming for the park. Specific site areas for public art may include:

- An overlook placed on the constructed berm as the highest elevation point within the park
- Causeway/bridge/entryway feature the beginning of the park experience
- Bio-swale (drainage ditch) leading to the water's edge/EEEC
- Water's edge experience key focal and view points within the water's edge system

Areas such as the entry feature and bio-swale to the water's edge could be combined into one public art opportunity.

Goals:

- Support the EEEC programming and key messaging for the park
- Grow from the design of the park and be integral to its forms
- Articulate the inter-relationship between various aspects of the project (constructed wetlands, park, EEEC)
- Provide 'outdoor classroom' experiences for park visitors

Budget:

Dependent on Council approval of park design

Timeline:

In order to integrate the work of an artist into the identified public art opportunities of the park, an artist will be selected in early 2007. Additional project based work may be appropriate once the conceptual design is complete.

Artist Selection:

Dependent on design, tender, and construction timelines. Open or limited Call to artists issued as an RFQ. The artist or artist team will be selected through the Public Art Program artist selection process, which will include interviews and review of professional references.

Potential Partners:

City of Calgary Parks

Ducks Unlimited

Alberta Environment

MD of Rockyview

Community Engagement:

Community engagement will be conducted as a part of the overall capital project community engagement strategy. The artist will be required to participate in the community engagement process and generate engagement strategies through the public art component for implementation.

Temporary Projects, Festivals, and Symposia

UEP services deal with issues of sustainability and limited natural resources. Specially-commissioned, temporary projects will emphasize the ephemeral nature of our relied-upon and necessary resources. Like festivals, temporary projects generate excitement within the community, draw attention to an ever-changing program, and create an ongoing series of opportunities for local artists, as well as for artists, scientists, and politicians from elsewhere to visit and work in Calgary.

Watermarks

Watermarks will be a curated temporary public art festival located in Prince's Island Park and along the Regional Pathway surrounding and leading up to the park. This bi-annual public art celebration will bring attention to the importance of the Bow River and the Bow watershed to the cultural, social, economic, and environmental health and development of Calgary. It will also encourage environmental sustainability and stewardship, key components of the UEP Public Art Plan's mission and vision. It is recommended that the installations remain in place for a minimum of one to two months during the summer to capitalize on summer recreational activities, festivals, events, and tourism to the region. The works should be sited so that they do not interfere with Park activities. To create a strong visual impact and encourage exploration of the waterfront, it is recommended that the number of installations range from six to ten per festival.

Scope of Work:

The Watermarks Team

The Watermarks project will have a standing committee (the "Watermarks Team") made up of a broad group of stakeholders who will act as advisors for the project. These stakeholders will include representatives from the Public Art Program, UEP, Parks, Prince's Island Park Management Advisory Committee (PIPMAC) and the local arts community. The Waterworks Team will be responsible for selecting the curator for each exhibition and for ensuring that all relevant City departments are represented on the Team.

UEP Public Art Project Coordinator

Every year, the Public Art Program will solicit proposals from curators/curatorial teams for review by the Public Art Program and the Watermarks Team. This Call for Curators will be distributed internationally. It will be issued by the Public Art Project Coordinator, who will organize the review of submissions for the Watermarks team, lead the selection meeting, draft a contract with the selected curator, and work with the curator to ensure the success of the Watermarks program. Responsibilities will include acting as liaison between the curator and related City departments, handling permitting issues, working with the curator on site selection and installation, communications, and marketing.

The Watermarks Curator

The selected curator will develop that year's focus for the exhibition; develop the Call to Artists; review artist qualifications and proposals; and recommend artists to the Watermarks Team and the Public Art Program for approval. The curator will then work with the artists through the development of their designs, conduct site visits during the fabrication and installation process, and work with the Public Art Program and the City to site the work. The curator will also be responsible for developing the content for a print and web-based catalog documenting the work.

The Call to Artists will encourage artists of local, regional, national, and international stature to create works for the exhibition. The selected works must be sensitive to the environment.

The Artists

The artists will be responsible for fabricating and installing their own works and for returning their sites to their original state when the exhibition is finished. The selected artists must follow the backpacker's motto of "pack it in, pack it out." Artists will provide an artist statement for their work.

Goals:

- To ensure that UEP Public Art continues to represent a new perspective on environmental issues, whether they are historical, scientific, or social

- To create a series of ongoing and ever-changing opportunities for artists and curators at all stages throughout their careers
- To celebrate the beauty of Calgary's summers
- To create opportunities for sponsorships and civic partnerships

Budget:

\$400,000 for the 2008 and 2010 festivals

Timeline:

A Call to Curators will be issued in early 2007. The curator will be selected by June 2007, and he/she will develop a Call to Artists by September 2007 for selection by December. The first Watermarks festival will take place in July and August 2008.

Curator Selection:

The UEP Public Art Project Coordinator and the Watermarks Team will solicit proposals from curators through an Open Call process. They may choose to select a theme for the year's festival based on issues that UEP is trying to focus on through their communications and education efforts, or the team may leave the content open for curators to define. The curator will be selected based on the following criteria:

- Professional expertise and experience
- Demonstrated ability to organize and manage an artist selection process, to collaborate with a multi-disciplinary team, and to work with several artists and manage several projects at one time
- Proven ability to develop and implement a strong exhibition statement that will illuminate the vision and mission of the UEP Public Art Plan and the intent of the Watermarks Festival

Artist Selection:

The selected curator may set the criteria for selecting artists for participation in the Watermarks exhibition. Every effort will be made to ensure that the talent of Calgary-based artists is highlighted in each exhibition.

This festival will provide opportunities to involve the local arts community in development and implementation. It also provides opportunities to collaborate with planned festivals for the island, such as Canada Day.

Ice Projection Festival

As Calgary is a winter city, UEP must manage water throughout the seasons. In an effort to celebrate this, it is recommended that UEP sponsor an ice projection festival. Artists from all over the world could be commissioned to create video projections that would be viewable on ice structures designed by artists. The event could be itinerant, highlighting different areas throughout the city every year. The first year, the event may take place on Prince's Island; the following year, it may take advantage of the pedestrian traffic along 17th Avenue SW. Ideally, the Festival would tie in with an existing winter event, such as Calgary's Winter Festival, and take place over the course of a weekend, with an opening event on a Friday evening and closing event on Sunday afternoon.

Scope of Work:

The Ice Projection Festival Team

The Ice Projection Festival project will have a standing committee, "Ice Projection Festival Team," consisting of a broad group of stakeholders who will act as advisors for the project. These stakeholders will include representatives from the Public Art Program, UEP, Parks, and the local arts community. This team will be responsible for selecting the curator for each Ice Projection Festival exhibition and ensuring there is representation from each relevant City department.

UEP Public Art Project Coordinator

Every year, the Public Art Program will solicit proposals from curators/curatorial teams for review by the Public Art Program and the Ice Projection Festival Team. This Call for Curators will be distributed internationally. The Public Art Project Coordinator will issue the Call, organize the review of submissions for the Ice Projection Festival team, lead the selection meeting, draft a contract with the selected curator, and work with the curator to ensure the success of the Ice Projection Festival program. Responsibilities will include acting as liaison between the curator and related City departments, handling permitting issues, working with curator on site selection and installation, and overseeing communications and marketing.

The Ice Projection Festival Curator

The selected curator will develop that year's focus for the exhibition; develop the Call to Artists, review artist qualifications and proposals, and recommend the selection of artists to the Ice Projection Festival Team and the Public Art Program for approval. The curator will then work with the artists through the development of their designs, conduct site visits during the fabrication and installation process, and work with the Public Art Program and the City to site the work. The curator will also be responsible for content development for a print and web-based catalog documenting the work.

The Call to Artists will encourage artists of local, regional, national, and international stature to create works for the exhibition. The selected works must be sensitive to the environment.

The Artists

The artists will be responsible for fabricating and installing their own works and for returning their sites to their original state after the exhibition is finished. The selected artists must follow the backpacker's motto of "pack it in, pack it out." Artists will provide an artist statement for their work.

Goals:

- To understand the role of ice in the water cycle beauty and hazard
- To ensure that UEP Public Art continues to represent a new perspective on environmental issues, whether this is historical, scientific, or social
- To create a series of ongoing and ever-changing opportunities for artists and curators at all stages throughout their careers
- To celebrate the beauty of Calgary's winters
- To provide opportunities for sponsorships and civic partnerships

Budget:

\$200,000 for 2009

Timeline:

A Call to Curators will be issued in early 2008. The Curator will be selected by March 2008, and will develop a Call to Artists for issue by June 2008 and selection by September. The first Ice Projection Festival exhibition will take place in mid-winter 2009.

Curator Selection:

The UEP Public Art Project Coordinator and the Ice Projection Festival Team will solicit proposals from curators. They may choose to select a theme for the year's festival based on issues that UEP is trying to focus on through their communications effort, or they may leave the content open for curators to define. The curator will be selected based on the following criteria:

- Professional expertise and experience.
- Demonstrated ability to organize and manage an artist selection process and to work with several artists at one time
- Proven ability to develop and implement a strong exhibition statement that will illuminate the vision and mission of the UEP Public Art Plan

Artist Selection:

The selected curator may set the criteria for selecting artists for participation in the Ice Projection Festival exhibition. Every effort will be made to ensure that the talent of Calgary-based artists is highlighted in each exhibition.

International Water and Infrastructure Symposium

Calgary is the right place to hold an international conversation that focuses on rivers in urban areas, and how and why city-dwellers should care for them. The UEP Public Art Plan takes measure of Calgary's watershed as well as UEP infrastructure knitted into it. From the encompassing Visual Language and Outfall projects to the more placespecific Pearce Weir project, the watershed connects our thinking to Calgary itself and provides inspiration for the artists who will activate the Plan.

UEP public art projects and initiatives will help to create distinctive places throughout the community while building awareness of The City's commitment to the safety and long-term sustainability of its water supply.

The Plan will propose interdisciplinary approaches to looking at and thinking about the Bow River, so that artists become key players in building public places and public awareness about water resources and responsibilities. The interdisciplinary approaches that we propose to initiate through the symposium will be a way to unlock these "hidden resources" rooted in Calgary's social history and demonstrate how the river can project the future of a city.

The symposium's speakers will be political leaders, environmentalists, artists, environmental designers, writers, and urban planners who share an understanding of why rivers are sacred, poetic places, but also how they are the key to the economic and social health of a city. Panels and speakers will focus on interdisciplinary thinking and activity. The symposium will discuss the idea that infrastructure works best in a city

when its function is considerate of aesthetics, public expression and civic identity. The symposium will focus on projects in which artists working in interdisciplinary settings have used ecology, conservation, and engineering as a way of expressing civic identity and creating interesting, beautiful places.

Annual Work Plan

As additional funding becomes available and communities begin to build out neighborhood parks and amenities, UEP should build in flexibility to respond to these opportunities.

In addition to the priority sites and initiatives outlined above, the UEP Public Art Committee should undertake an annual review of the results from the Imagine Art Here workshop and this Plan. Such a review will bring a fresh understanding of current development, and relevance to park planning and other concurrent opportunities. The Imagine Art Here workshop yielded a tremendous amount of good energy and strong ideas for placement of public art throughout the community. See Appendix B for a full write-up of ideas and recommendations.



Section VI

COMMUNITY INVOLVEMENT

UEP Curriculum Kit

An inquiry-based, object-centred Public Art Curriculum Kit should be created as a tool for teachers to help students both appreciate public art and increase their understanding of art's complex role in our society and environment. Such a kit would also provide educators with a unique opportunity to focus attention on issues related to public art in their own communities.

Bringing together images, locator maps, posters, teaching suggestions, and information about each artwork, the kit would be designed to encourage classes to explore the nature of public art and establish a context for understanding it in the urban environment. The suggested activities would focus on aesthetics, but could be as expansive as recommending activities in environmental education, social studies, language arts, math, science, technology, the performing arts, and artmaking.

Area arts educators could assist by forming a Teacher Advisory Committee to provide input to the development of the curriculum for the kit. The committee would ensure that the kit is teacher-friendly and that the interdisciplinary teaching suggestions coordinate with existing curricula areas. The model for this type of kit was created by Barbara Decker and Jane Birdsall-Lander in St. Louis. See <u>www.stlpack.org</u> for an example.

Artist Mentorship Program

As a result of this plan, the Public Art Program is establishing a new mentorship program as a professional development opportunity for Calgary-based artists. This program is designed for artists who have not received commissions from the Public Art Program. Artists selected to participate in the mentorship program have the opportunity to work with an established public artist on a significant public art commission and to earn an honorarium of up to \$10,000 dependent of the scale of the project and the artist's proportionate role.

Interested Calgary artists will be selected by the mentoring artist and the associated Public Art Coordinator leading each applicable public art project. Mentoring artists may shortlist and interview emerging artists prior to making a final selection. The selected artist must display an active interest in learning from an experience such as this and have a skill set that will benefit the development of the project.

Participating artists will work directly with the established artists. The scope of the work will vary for each mentorship opportunity, depending on the nature of the public art commission, the mentoring artist, and the needs and skills of the emerging artist selected to participate in the program. Artists will also liaise with the associated Public Art Coordinator and attend public meetings, community meetings, and design team meetings, as applicable, to develop a broader base of knowledge of the requirements of public projects.

Because of the time commitment required, this opportunity is limited to artists living in Calgary. No travel reimbursement is available.

To be considered for the mentorship program, artists must submit materials according to The City of Calgary Public Art Program specifications.

Mentorship Opportunities

It is recommended that a local artist be commissioned by the Public Art Program to work with selected lead artists for the Pearce Estate Park and Weir project as well as Shepard Legacy Park.

This artist will be mentored by the lead artist and assist with research, fabrication, and installation as determined by the lead artist.

Scope of Work:

The scope of work will be dependent upon the needs of the lead artist and will be mutually agreed upon by the artist, the UEP Public Art Program Coordinator and the selected mentee.

Artist Selection:

A Call for Artists will be distributed throughout Calgary to find an artist interested in working on a large-scale, high-visibility public art and design project. The artist will be selected through the Public Art Program artist selection process, which will include interviews and a review of professional references.

Artist Residency

Water Centre

It is recommended that a local artist be commissioned to work as a resident artist at the new Water Centre. This artist will act as liaison between the artists selected for the Visual Language project and the Outfall project and other UEP public art related projects.

Scope of Work:

The UEP resident artist will be responsible for ensuring that the Visual Language project artist(s) and the Outfall project artist(s) have all the information they need, including site scoping, UEP service information, GIS materials, etc. The resident artist will also be responsible for documenting the development of these projects in a creative way and making exhibitions that will not only draw visitors to the Water Centre, but promote the Public Art Plan to a broader audience.

Goals:

- To build a consistent voice for the UEP Public Art Plan through its first year
- To strengthen relationships between the Public Art Program and UEP employees at all levels Residency contracts may be extended dependent on specific project requirements.

Budget:

A resident artist will work onsite at the Water Centre 10 to 15 hours a week for one year.

Artist Selection:

A Call for Artists will be distributed throughout Calgary to find an artist with a strong ability for cataloging as well as documentation. The artist will be selected through the Public Art Program artist selection process, which will include interviews and a review of professional references. SECTION VI COMMUNITY INVOLVEMENT

Appendix A Public Art Program Supporting Documents

http://www.calgary.ca/publicart

The following resources are available at the above address:

- 1. Public Art Policy for The City of Calgary
- 2. Public Art Operations Guidelines
- 3. Glossary of Terms



Appendix B Imagine Art Here Workshop Notes

Imagine Art Here! UEP Public Art Plan April 7, 2006 Full notes from this workshop can be reviewed in the office of the Public Art Program

AGENDA

8:00 a.m.	Registration, teams assemble
8:20	Welcome and purpose of the day
8:30	Workshop overview and public art master planning process
8:45	What is Public Art and how can it help achieve this vision?
9:30	Instructions for work groups
9:45	Team work session
11:30	Working lunch
12:00 p.m.	Team presentations
1:00 p.m.	End

INSTRUCTIONS

Today we invite you to share ideas about public art projects that will encourage public interest, involvement, and education surrounding Calgary's public utilities and environmental services managed by the UEP. The key message is that public art in collaboration with other disciplines can create beautiful places that encourage sustainability and stewardship of the environment. UEP public art projects shall provide the City of Calgary and its citizens with an opportunity to tell a story about its origins, and to participate in the preservation of its most important and sustainable resource, the Bow River. Public art can encourage interest and development by highlighting this unique environmental relationship as Calgary takes the stage as an ecologically visionary international city.

TEAM WORK SESSION

Working in a team, you will focus on one of the identified "site areas" throughout Calgary within the Bow River watershed and the UEP Watershed.

Within this area, your team may choose to discuss which environmental principles may be explored at each site including, but not limited to:

- Biodiversity
- Climate Change
- Ecosystems, Energy
- Water
- Lifestyle and Sustainable Consumption
- Food and Agriculture
- Peace and Human Rights
- Human Health and the Environment
- Governance and Citizenship
- Sustainable Urbanization and Transportation
- Indigenous and Local Knowledge

Also, you may wish to think about individual sites in regard the views to water, where one might touch the water, or cross it.

As a result of this discussion, recommend types of artwork that will be able to illustrate these concepts.

Recommendations can include permanent art, temporary art, art integrated into functional objects, and new infrastructure.

Once you are in your teams, we recommend that you:

- 1) If you do not all know each other already, take a few minutes to introduce yourselves to one another and share what interested you in participating in the workshop.
- 2) Review all the planning documents that we have provided and allow each participant to share what they know about the sites and future plans for the site.
- 3) Discuss how the area and sites within are currently used.

Some questions to consider:

- Which places are the most used? The most visible? What are the gathering places?
- What is the dominant physical feature of the area now?
- Who is using the place? What are they doing? How are they using the space?
- What would public art add to this place? Where could it be located? What would it need to accomplish?
- 4) As a group, discuss and fill out the Overall Area Evaluation.
- 5) Work together to put your ideas on the big map of your focus area. Please mark it up with drawings, sketches or written ideas about where public art should be placed and what it should achieve.
 - Feel free to use the markers and other supplies provided. Use the "public art cards" as symbols or draw your own pictures.
 - Be creative.
 - The worksheets labeled "Project Card" are available for you to provide written documentation of each of your ideas.

PRESENTATIONS

Using your marked-up maps, your team will have five minutes to present your ideas back to the full group starting at 12:00 PM.

RESULTS

We will be collecting your maps, Project Cards and Overall Area Evaluation at the end of the workshop. The results from the workshop will be used by the planning team to develop final recommendations for the UEP Public Art Plan.

Participants

Nose Creek

Facilitator: Stacey Dyck, Public Art Program

- 1. Susan Chow, Parks Planning
- 2. Sylvia Trosch, Youth Education Coordinator, UEP
- 3. Terry Thompson, Calgary Airport Authority
- 4. Lawrence Eisler, Eisler Design
- 5. Anne Lee-Carswell, Trout Unlimited
- 6. Yin Deong, Watershed Management Team Lead UEP

Bonnybrook/Pine Creek

Facilitator: Mark Crisp, CH2M Hill

- 1. Leanne Square, Issue Strategist
- 2. Mary Anne Rutherford, Communication Analyst UEP
- 3. Diane Whitburn, Distribution Control Technician UEP
- 4. Keath Parker, Parks Planning
- 5. Brenda Japp, Community Member
- 6. Gail Anderson, Public Art Board
- 7. Natalia Zoldak, student, U. of C.

Centre City/Beltline/Escarpment

Facilitator: Jeannie Gartly

- 1. Jeff de Boer, Artist
- 2. Eileen Stan, Victoria Crossing BRZ
- 3. Dennis LeFreniere, Parks Community Liaison
- 4. Campbell Berry, Special Projects Leader, Corporate Properties
- 5. Dick Ebersohn, Imagine Calgary
- 6. Brian Baker, Landplan Associates
- 7. Cam Costley, Harvard Development

Shephard Wetland/Forest Lawn Creek

- 1. Russ Golightly, Corporate Properties
- 2. Katherine Ylitalo, Public Art Program
- 3. Bobbie Olson, 02 Planning + Design, Inc.
- 4. Dave Lange, Arts and Culture
- 5. Verna Reid, Public Art Board
- 6. Susan Ryan, River Valleys Committee
- 7. Lara Tierney, Engage Unit
- 8. Margaret Beeston, Water Efficiency Program Specialist, UEP
- 9. Anne Charlton, Parks Planning

Pearce Estate Park and Weir

Facilitator: Tom Tittemore, Public Art Board/Architect

- 1. Garth Balls, Landplan Associates
- 2. Michael Magnan, EVDS: University of Calgary
- 3. Peter Von Tiesenhausen, artist
- 4. Thorne Forest, Public Art Board
- 5. Nancy Stalker, UEP
- 6. David DePape, Sam Livingstone Fish Hatchery
- 7. Cliff Garten, artist

Glenmore Reservoir

Facilitator: Paul Fesko, Manager Strategic Services, UEP

- 1. John Jagorinec, UEP
- 2. Bill Morrison, River Valleys Committee
- 3. Kathleen Ennis, CH2M Hill
- 4. Teri Posyniak, Public Art Board
- 5. Dawn Boutilier, Planner Established Communities, City of Calgary
- 6. Kym McCulley, Parks Planning
- 7. Nicola Roe, Parks Planning

East Village/Fort Calgary

Facilitator: David Down, LUPP, Senior Architect

- 1. Sharon Small, City of Calgary, Aboriginal Services
- 2. Kathleen Young, City of Calgary, Corporate Properties Services and Buildings
- 3. David Plouffe, City of Calgary, LUPP, Heritage Planner
- 4. Sonny Tomic, LUPP, Senior Urban Designer
- 5. Ray Spiteri, Inglewood Community Association
- 6. Sara-Jane Gruetzner, CEO, Fort Calgary
- 7. Suzanne McLeod, Consultant, Aboriginal Art History

Shouldice/Edworthy/Memorial Drive

Facilitator: Dave Harrison, Parks Planning

- 1. Catherine Hamel, University of Calgary
- 2. Dave Spencer, Stantec
- 3. Jeremy Sturgess, Sturgess Architects
- 4. Mike Waters, Community and Neighbourhood Services
- 5. Michael Kenny, Manager, Parks
- 6. Richard White, Calgary Downtown Association

UEP Imagine Art Here – notes from Project cards submitted by teams

Site	Goals	Audience	Environmental Messages	Partners	Community involvement
Nose Creek					
Science Centre, Confluence Park	Create awareness around the conflict of urbanization and natural processes (as it relates to Nose Creek)	 Citizens Developers in N.W. Calgary Commercial and industrial users 	Calgarians lifestyles have an impact on Nose Creek. What goes into storm drainage and how much.	 Nose Creek Partnership Trouts Unlimited Parks Water Resources FCC Community Associations 	 School groups Community based action
Off site in community Stormwater outfall site Storm water retention pond Full scope of what makes Nose Creek	Increasing awareness of the storm water system, its impact and how we impact that system	 Homeowner Local industry Citizens Developers 	Informing public about storm water system and impact. Our actions at home impact the water system	 Parks Trouts Unlimited Golf course Water resources School board Community associations development community UDI? Nose Creek Partnership 	 School programs Community programs Educational programs
	Quiet place for reflection – Laycock Park ¹ . Park has sports fields and this could introduce a passive function into the Park.	CitizensVisitors	Creek is an important part of the watershed Water quality of Bow River is impacted by Nose Creek Nose Creek is an ecosystem that needs help	 Nose Creek Partnership Trouts Unlimited Parks 	

 $^{^1}$ In a phone conversation with Susan Chow following workshop, she mentioned that the City is in the process of developing Laycock Park adjacent to Nose Creek at Deerfoot Trail. It is a neighborhood park with sports fields. The Creek is at a v-shape here and the banks need to be stabilized and regraded.

Site	Goals	Audience	Environmental Messages	Partners	Community involvement
	Functional integrated art that itself addresses environmental issues/aspect of the Nose Creek environment/situation		The force of water impacts the landscape	• UEP	
Airport	Not discussed – follow up with Terry Thompson				
Pine Creek	·				
Water education					
process					
Escarpment					
Opportunity					
Gateway sculpture					
Teepee circles					
River Valley, toe of Bow River Escarpment at S. extremity of the City		 future adjacent residents fishermen pathway users visitors to WWTP 	Sensitive interface between natural landscape and built form, conscious environmental responsibility to Bow ecosystem	 adjacent land owners developers DFO RVC Trout Unlimited CPAC 	 Art installation could be interactive, dynamic
Bonnybrook					•
Industrial area, near	Educational, historical	 all Calgarians 	Environmental		tours?
City Centre		international visitors	stewardship		
Centre City		•			•

Goals	Audience	Environmental Messages	Partners	Community involvement
Connect users of park and residents to the River Art piece should stand on its own and not necessarily be a bridge/pedestrian connection across river as a primary concern Engage the person with the River	 Park users Community residents A bridge to the river not a bridge over the river 	An opportunity to experience the seasons of the river (e.g. able to see ice formation) Experience the pioneer experience of existing residents	 West End community association Hillhurst community association Shaw Residential developers 	 Take ownership of issues along the river's edge.
Terminus visit at 8 th St. and River. This terminus should be a dramatic, landmark art piece An understanding of the state of the River Interpretive garden area piece Give the area an identity Heighten the entrance to downtown and to Prince's Island Idea of glacier melting	 Tell the whole story of the River History of west end of lagoon 	The origin of how the water gets to the City. The fragility of the water and its unknown future (drought?)	 Corporate NGO's – ecotrust, Sierra Club 	 Communities in general could support this type of interpretive art project. Even schools.
-	Connect users of park and residents to the River Art piece should stand on its own and not necessarily be a bridge/pedestrian connection across river as a primary concern Engage the person with the River Terminus visit at 8 th St. and River. This terminus should be a dramatic, landmark art piece An understanding of the state of the River Interpretive garden area piece Give the area an identity Heighten the entrance to downtown and to Prince's Island	Connect users of park and residents to the RiverPark users Community residentsArt piece should stand on its own and not necessarily be a bridge/pedestrian connection across river as a primary concern- Not a bridge over the riverEngage the person with the River- Tell the whole story of the RiverTerminus visit at 8 th St. and River. This terminus should be a dramatic, landmark art piece- Tell the whole story of the RiverAn understanding of the state of the River- Tell the whole story of lagoonInterpretive garden area piece- Fell the whole story of the state of the RiverGive the area an identity- Tell the whole story of the state of the RiverHeighten the entrance to downtown and to Prince's Island- Terminus visit at to prince's Island	Connect users of park and residents to the RiverPark users Community residentsAn opportunity to experience the seasons of the river (e.g. able to see ice formation)Art piece should stand on its own and not necessarily be a bridge/pedestrian connection across river as a primary concern- not a bridge over the river - not a bridge over the riverAn opportunity to experience the seasons of the river (e.g. able to see ice formation)Engage the person with the River- not a bridge over the riverTell the whole story of the RiverThe origin of how the water gets to the City. The fragility of the water and River. This terminus should be a dramatic, landmark art piece- Tell the whole story of the RiverThe origin of how the water gets to the City. The fragility of the water and its unknown future (drought?)An understanding of the state of the River- Tell the whole story of lagoonThe origin of how the water gets to the City. The fragility of the water and its unknown future (drought?)An understanding of the state of the River- Tell the whole story of lagoon- Tell the whole story of lagoonAn understanding of the state of the River- Tell the whole story of lagoon- Tell the whole story of lagoonAn understanding of the state of the River- Tell the whole story of lagoon- Tell the whole story of lagoonHeighten the entrance to downtown and to Prince's Island- Tell the whole story of lagoon- Tell the whole story of lagoonPrince's Island- Tell the whole story of lagoon- Tell the whole	Connect users of park and residents to the RiverPark users Community residentsAn opportunity to experience the seasons of the river (e.g. able to see ice formation)West End community associationArt piece should stand on its own and not necessarily be a bridge/pedestrian connection across river as a primary concern• Tell the whole story of the RiverAn origin of how the water gets to the City. The origin of how the water gets to the City. The fragility of the water and its unknown future (drought?)• Corporate • ShawAn understanding of the state of the River• Tell the entrance to downtown and to Prince's Island• Tell the entrance to downtown and to Prince's Island• Corporate • A bridge to the fiver • Tell the entrance of the state of the River• Corporate • ShawAn understanding of the state of the River• Tell the entrance to downtown and to Prince's Island• Tell the entrance to downtown and to Prince's Island• Corporate • CorporateConnection • Corporate • Corporate• Tell the entrance of lagoon• Tell the entrance to downtown and to Prince's laland• Corporate • CorporateConcer• Tell the entrance to downtown and to Prince's laland• Tell the entrance to downtown and to Prince's laland• Corporate • CorporateConcer• Tell the entrance to downtown and to Prince's laland• Tell the entrance to downtown and to Prince's laland• Corporate • Corporate • CorporateConcer• Tell the entrance to downtown and to Prince's laland• Corporate • Corporate

Site	Goals	Audience	Environmental Messages	Partners	Community involvement
Site Prince's Island/Eau Claire/N. Escarpment (6 th – Centre)	Lumber interpretation (landmark) Engage downtown with the River Bring river experience (high tech?) into the core. Bring history of River into downtown A man-made piece of interaction up to the river's edge Bring the river image into downtown streets. Live camera from the glacier with a "reed" to the downtown (like Skagit Streaming)	Audience	Environmental Messages Technical/visual graphics along Banlay into Downtown. I.e. rain column at Gulf Square (9 th Ave. – Bow River) tell story of rain. i.e. show beautiful glacier and how melting would impact - glacier to flowing river.	Partners	Community involvement
	Show the river in various positions as it moves toward the City				
	Should be a visual connection from downtown, through Eau Claire, through lagoon, through Prince's Island, to the escarpment (enhance a visual in the escarpment – a				

Site	Goals	Audience	Environmental Messages	Partners	Community involvement
MacLeod Trail Site (between 11 Ave. and 12 Ave.	A gateway to downtown A gateway to Stampede Water for the basis of agriculture	•	A growing site using water to grow vegetation – a little dome that grows vegetation year round.	 Victoria Crossing BR2 Old College Stampede Communities parks 	•
East of Centre Street	should have something to do with bridges Bridges should act as viewpoint	 Work with homeless people to see what they would like to see in terms of art. 		 Chinese community Homeless community drop in centre? 	•
Shepherd Wetlands/Forest Lawn Creek		•		•	•
Overall	opportunity to synthesize and create a system of opportunity to knit education, H2O cleaning, art, recreation, environment. More than decorating details. Art is the glue along the system and part of the bigger system.	 Curriculum based school program Recreationists – ethnically diverse, economically diverse, families, anyone whose H2O goes through system. 	#1Sitsika live downstream and have right to clean H2O (Sustainable Urbanization) #2 Lifestyle and Sustainable Consumption #3 Human Health and Environment with Aesthetics ²	 Town of Shepherd – non-monetary Architects/LA's, Curriculum Adjacent farmers Politicians Pembina Institute Calgary Foundation Industrial Developer Donor nodes along F.L.C. Highlight green industry along the way 	 Community engage process with geographic/cult ural communities. Industrial partners with community partners with artist/design team.
Glenmore Reservoir		•			•

 $^{^{2}}$ Forest Lawn Creek has to have a strong design presence - perhaps as a space for 6-month or temporary art.

Site	Goals	Audience	Environmental Messages	Partners	Community involvement
Canoe Club (priority 4)	Emphasize preciousness, fragility Healing of land/water Protect escarpment edge using public art to integrate human face/art/land All problems in water start on the land.	 Site users Special events/dragon boats/cancer patients Recreational users – rowers, canoers 	Ecosystems – site is very manicured – should be more natural – lifestyle and sustainable consumption.	 Parks; recreation Calgary health region Chinese community Canoe club Tom Baker cancer clinic Schools Lakeview Community/business area Golf course Tsuu T'ina 	 Can be consulted. Could be part of creation/fabricat ion
North Weaselhead Parking Lot Entrance (priority 3)	Celebrate seasonal sensitivity; celebrate plants/wildlife. Transitional environmental area where city meets nature. Continuum to tie all sites together> discovery + journey Source of tap > final use	 Cyclists Walkers Nature lovers Homeless Tsuu T'ina 	Spiritual/zen/meditative/ contemplative Passive control of speed via public art	 Tsuu T'ina Parks Recreation Weaselhead Natural Area Preservation Society Elbow River Partnership Elbow Valley Cycle Club 	 Consultation Idea generation
Boat Sculpture Area at Glenmore Water Treatment Plant (at escarpment) (priority 2)	Barrier aesthetic – get rid of barbed wire Historic theme Safety theme – keep people restricted from City water Use art to get rid of barbed wire fencing/storage/screen ing the ugly	 Walkers/runners Bikers GWTP employees 	Human health and environment Lifestyle and sustainable consumption	 GWTP/UEP/Parks 	 Input Community meetings Questionnaires to schools Local business

Site	Goals	Audience	Environmental Messages	Partners	Community involvement
Sandy Beach (priority 4)	Find better balance between existing use and future use Expose damage Educate people on size of human footprint Passive control with education to create constraints	 Couples w/out children and dogs Commuters Community users Rafters and tubers Residences along Elbow Picnickers Skateboarders/roller bladers 	Ecosystems – reclaim and maintain Land use Lifestyle & sustainable consumption	 Off-leash Calgary River Valley Committee Emily Follensbee School Enmax Urban forestry Parks 	 Consultation
Yacht Club at Heritage to Sailing Club "South Shore" (priority 4)	Art is to raise awareness of how infrastructure works Make it more attractive Linked to opening up storm drains to connect back into the community.	 Oak Ridge Heritage Anyone whose yard drains into the plan area Glenmore Landing Oakridge Plaza School Children Boaters 	Restoration – community expression areas Sustainable urbanization - enhancement Reclamation – emphasize preciousness of water and our work rehabilitation	 All communities who drain into plan area 	 consultation
Fort Calgary			Max 0 Las Las Las das das	•	The sh Decad
Storm Pond/Pedestrian Bridge (priority 5)	Ecological/historical commemoration restore a natural flow Original Streams/stormwater management Bring people/community to the site	 citizens of Calgary 	Man & Land – changing values and urban demand for utilities	 communities (connectivity), city East Village/ rovers 	 Through Board; planning/design
	View from above				

Site	Goals	Audience	Environmental Messages	Partners	Community involvement
"Tangle of River Crossings at East Village – using lost spaces; existing storm outfalls (priority 3)	Connect people to river; make better use of riverbank in areas where intervention has already occurred	 Citizens Drivers Pedestrians Boaters 	Ecosystem fragility Stewardship Repair Intersection of City with nature	 Transportation infrastructure 	•
Pedestrian bridge over Elbow River (priority 5)	Connectivity of site to Inglewood (Outwest Park) Connect Deane House to Fore Continuity of river pathway; views of river Metis settlement	 everyone 	Access Peace and human rights meeting point Indigenous presence and local knowledge Water, lifestyle & sustainable consumption (HBC role)	 HBC Corporate partners Ft. Calgary City Glenbow, aboriginal and Metis community 	 Interactive (installation, walk through)
Point on Saint Patrick's Island opposite Fort Calgary (priority 5)	Repair damaged natural area Provide focal point for key view back to Fort Provide boat beach to avoid future damage to bank.	 Recreation users General public 	Relationship of river to history/city Lifestyle/teaching about sustainable practices Biodiversity – fishing opportunities	•	•
Outwest Park/Deane House/Gateway to City/River Pathways/Inglewood/ Ramsay (priority 5)	Provide gateway and define access to Elbow River system Provide views down Elbow to Bow Celebrate river, history, railroad	 citizen's visitors 	River access – original plan – series of steps down to river edge All of the above – existing contamination and how it is dealt with Railway crossing and sensitivity to the river	 CP rail City Inglewood/Ramsay Stampede 	 Community is already fundraising and very involved

Site	Goals	Audience	Environmental Messages	Partners	Community involvement
East Village Promenade (priority 3)	Invite people of all ages to participate in the space; opportunities for river view points and explanation/education. To provide/enhance sense of place, fun, active, moving through and staging	 As above 	Viewpoints and education about all aspects of revering environment; impact of urbanization; historical uses	 Parks Foundation Arts of Calgary Corporate Calgary 	 City engagement in design – selection of artworks
"Raptures" ice/light sculpture/projections Festival idea (priority 3)	Celebrate art of nature to understand nature of art. Microclimate; about transformation; cycles impermanence (the continuum)	Everyone	All of the above by projecting images/colour to ice piled on banks (Bow River)	 Local artists Residents Historians Photographers 	 Supply images i.e. family photos Historic photos a drawing of the concept is available)
Shouldice Park					,
16 th Ave. Bridge	Possibility for water taxi system. The river crossing at the bridge as gateway, celebration of the river. Year round use of the site	 Road Users on 16th Recreational Pathway users 	PLAY One of the few sites where there aren't roads, buildings, etc. Exploit the play and open space aspects of the side. Outdoor rooms that explore the relation to the river.	 Montgomery community association 	
			water at the west end. Illustration of patterns of development		

Site	Goals	Audience	Environmental Messages	Partners	Community involvement
Edworthy Park	Reclaim the deadspace bounded by roads. Possibility for access to deadspace. Large space currently non-functional. Redesign the bridge of Edworthy. Focus on the river valley from the west. Water taxi as artwork Gateway to the river valley from the west.	 Provide a focus at the interchange. Chinook winds moving up the valley (e.g. sculpture expressing the wind, animated sculptures. Explore the groundwater seeping from the slope 			
Memorial Drive at Parkdale	Link to water connection at Shouldice Transition between urban core and outlying areas. Hub of roadways and the river. Views of downtown and Edworthy escarpment. Create a quiet place away from the road and close to the river. Outlook/access to river and outfalls Use of lighting Fountains powered by outfall Sound features Animated features Street furniture, utilities as sculptural elements relating to the river.	 recreational users community, vehicular traffic, Colonel Belcher residents 	Natural use of the site – pelicans Break up the linear nature of the corridor, extend the street grid at nodes. Some kind of connection to the island at the major node. Expose the outfall structures and their function.	Parkdale C.A.	

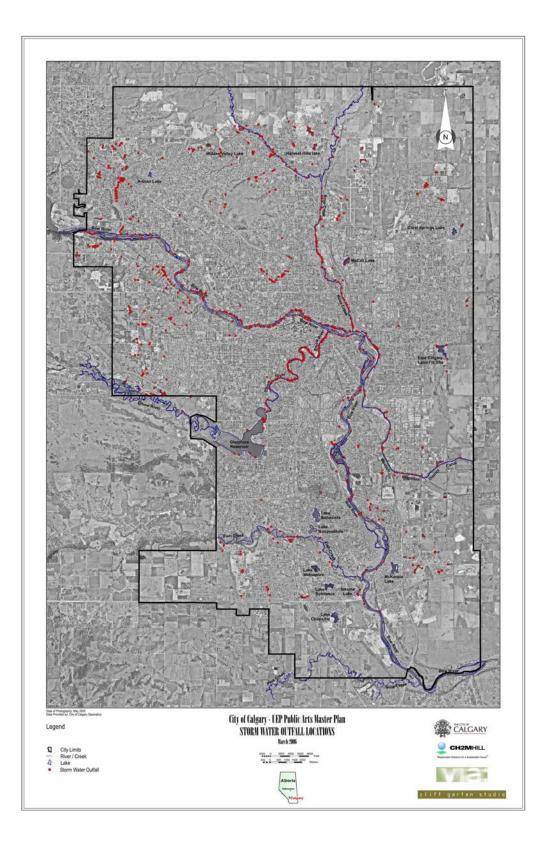


EXHIBIT- 14 COMPREHENSIVE WORKING BASE MAP – STORM WATER OUTFALL LOCATIONS

This map provides a telling picture of the multiple points of storm water discharge into the rivers, creeks, ponds and other water bodies throughout the City, and the importance of understanding the impacts of this discharge on water quality and the health of the river systems.

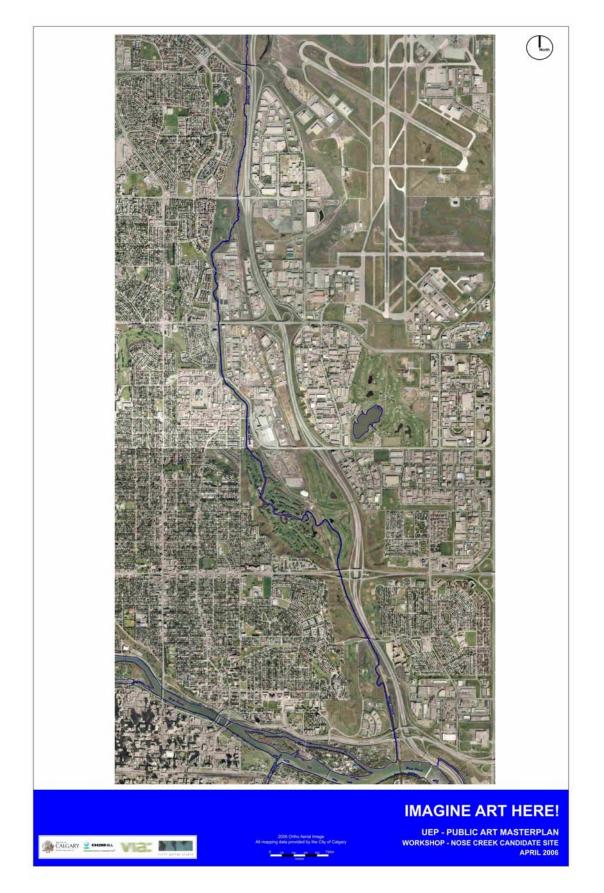


EXHIBIT- 15 IMAGINE ART HERE- WORKING BASE MAP – NOSE CREEK SYSTEM The maps were provided to participants of the Imagine Art Here Workshop held in June 2006 as a tool to discuss opportunities and constraints for the preliminary sites selected for the UEP Public Art Plan.

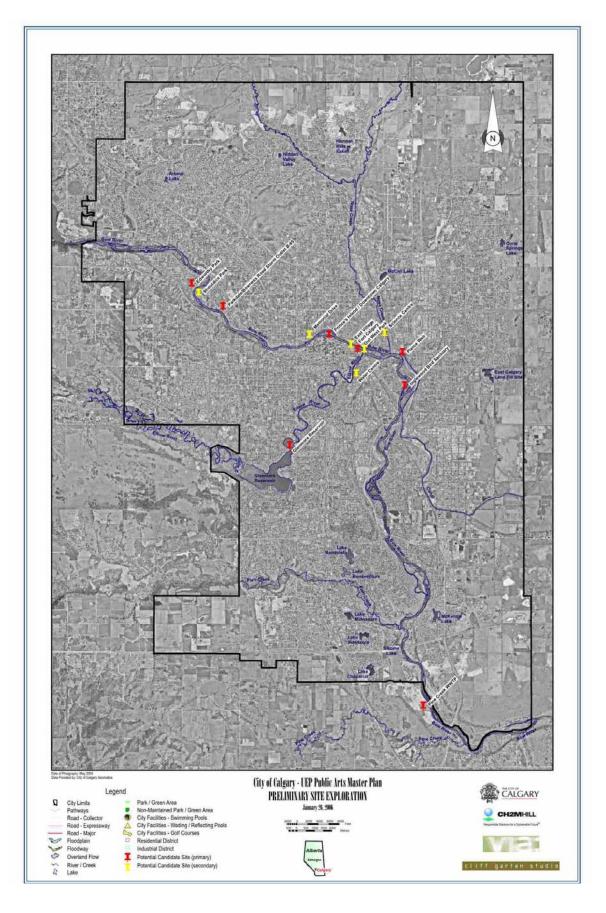


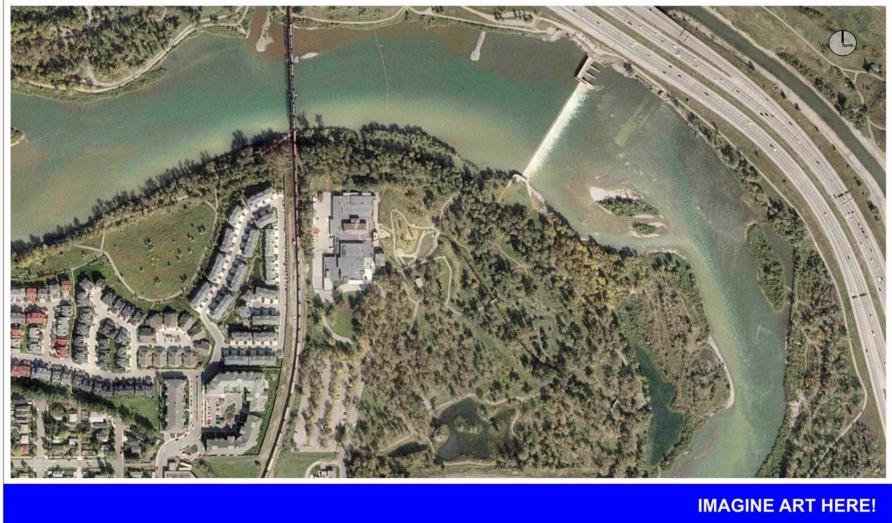
EXHIBIT- 16 IMAGINE ART HERE- WORKING BASE MAP – PRELIMINARY SITES EXPLORED *This map was prepared as a working study for sites explored for the team and workshop participants.*



EXHIBIT- 17 IMAGINE ART HERE- WORKING BASE MAP – CENTRE CITY Working map for the downtown core.



EXHIBIT- 19 IMAGINE ART HERE- WORKING BASE MAP – EDWORTHY PARK



UEP - PUBLIC ART MASTERPLAN WORKSHOP - PEARCE ESTATE PARK AND WEIR CANDIDATE SITE APRIL 2006

2005 Ortho Aerial Image All mapping data provided by the City of Calgary

EXHIBIT- 20 IMAGINE ART HERE- WORKING BASE MAP - PEARCE WEIR AND ESTATE

CALGARY 🧕 CH2MHILL



EXHIBIT- 21 IMAGINE ART HERE- WORKING BASE MAP - GLENMORE RESERVOIR



Appendix C UEP Public Art Committee Terms of Reference

Mandate:

The UEP Public Art Committee is formed and operates within the Department of Utilities and Environmental Protection to oversee implementation of the UEP Public Art Plan and to ensure the strategic expenditure/investment of funds allocated for public art within the Department.

Responsibilities:

Representatives are the key contacts for UEP public art and provide ongoing communication between the UEP Public Art Committee and their respective Business Units.

Specific responsibilities include:

- Promote awareness and understanding of the UEP Public Art Plan and the resulting public art
- Ensure coordination with other City initiatives
- Act as a resource to Business Unit staff
- so Input into UEP Public Art Plan development and implementation
- Communication
- Review individual project plans

Authority:

To direct the implementation of the UEP Public Art Plan and all associated expenditures/investments.

Composition

Representatives from:

- Solid Waste and Drainage
- Land Information and Mapping

- Community & Customer Initiatives
- Key planning partners (i.e. Parks Planning, Centre City Planning)
- so Public Art Project Coordinator for UEP
- Public Art Program Communications
- Administrative support from within the Department

Meetings:

Quarterly or as required at the call of the Chair.

Chair:

Manager or Leader from within UEP



Appendix D City's UEP Infrastructure

Water Services

- Storm Water Infrastructure
 - Outfalls 500 plus
 - Catch Basins
 - Overland conveyance systems (gutters, swales, etc.)
 - Underground Pipe Systems
 - Lift Stations (drainage)
 - Retention Lakes (wet/dry/wetlands) 150 plus lakes and depending on access there may be up to 3 signs at each
- - Bonnybrook WWTP
 - Fish Creek WWTP
 - Shepard Storage Lagoons
 - 5 odour control sites
 - Lift Stations (sanitary)
 - Calgro
- Water Treatment/Water Supply Infrastructure
 - Bearspaw WTP
 - Glenmore WTP
 - (6) Bulk Water Fill Stations
- Other
 - Water Centre
 - 194th Street and Macleod Trail SE South Service Centre
 - Manchester Complex Buildings B,H,J,K,L,M,N,S,U and Butler Rehab Building
 - Vehicles: 492 (vehicles and equip. leased from Fleet).
 - For trailers etc : 133 (owned and maintained by Water sources/Shops)

Waste and Recycling Services

- - 3 active landfills complete with:
 - 3400 acres of managed land
 - 3 scale facilities
 - 51 vehicles
 - 3 backhoes
 - 3 tractors with mowers
 - 3 Site operations offices

- 2 landfill gas to energy systems
- 1 landfill bioreactor
- 1 industrial waste disposal facility
- 260 monitoring wells
- 1 laboratory
- 6 inactive landfills
- 70 monitoring wells
- 2 active landfill gas venting systems
- 2 class 'A' ball diamonds
- 1 birthplace forest
- Recycling
 - 50 Recycling Drop Off Depots (Bins, signs, fencing, information)
 - 2 Buildings for vehicle parking and administration offices (Bldg E Spring Gardens and Mayland Heights)
 - 636 Recycling Bins
 - 33 Vehicles
 - 1 Mobile Recycling Trailer
 - 5 Pieces of Equipment: 2 trailers, Bobcat, Gravely, Forklift
- Sollection
 - Approx I30 collection trucks
 - 3 truck storage and collection facilities (one per landfill)
 - Commercial collection trucks
 - hundreds of commercial collection bins
 - Administration



Appendix E GIS and Developments in Recent Art

The application of Geographical Information Systems (GIS) mapping has become a creative tool for visualization, orientation and decision-making about the places we live and our impact on the environment. In recent years GIS has become an essential part of several artistic processes that utilize the technology to describe spatial and temporal characteristics of a place. As noted in *Else/where: Mapping New Cartographies of Networks and Territories*, mapping has evolved from the simple cartographic recording of a place to "a collective enabling enterprise," a creative act that describes and constructs the space we live in, a project that "reveals and realizes hidden potential." (From essay: Where/Abouts Janet Abrams and Peter Hall page 12 Quoted – James Corner "The Agency of Mapping: Speculation, Critique and Invention" in Denis Cosgrove, ed. Mappings. London Reaktion Books, 1999 p. 213.

The use of GIS/GPS technology and mapping software has emerged as a powerful medium for several artists in Europe and North America. The British artist, Jeremy Wood used off the shelf GPS technology to transcend the traditional boundaries of maps, and create a link between global technology and local experience of walking through a neighborhood. This is manifested in his recent work, centered in London, England, which utilized the GPS and GIS technology to "draw" within an environment such as a, local neighborhood, parking lot, golf course or even on water using a boat. One of the outcomes of the process is the use of the technology to create a "public cartography" where people can log on and contribute to the drawing prepared on land and water, based on their own walking or traveling experiences. (Exhibit 6 and 7)

In the context of the current UEP public art process, the decision to use GIS mapping in a very basic manner to record the layers or "themes " of the City was in part to provide materials to develop future investigations using GIS as an artistic medium. This foundation is therefore a means to utilize GIS technologies to measure, record and transcribe the changes in the places we live and work. In many respects this becomes an opportunity for a highly interactive public process that provides an opportunity to contribute to the narrative of the watershed and the rivers that have defined Calgary and its region.

With the growing concerns about our impact on the environment and climate change, the artist Natalie Jeremijenko who runs the University of California Experimental Product Design Lab in San Diego, has used mapping to communicate the importance of understanding progressive

physical changes in the environment. Her work has focused on the cloning of one thousand Paradox Trees which were then planted on specific sites in San Francisco and Bay Area. (<u>http://www.onetrees.org/</u>).

A key aspect of this project was to monitor and map the impacts of the social and environment on these genetically identical trees. ("Barks to Bites" Alice Twemlow pg 254-256 Else/where: Mapping New Cartographies of Networks and Territories) In partnership with the architectural firm Terraswarm, a map was produced for 'one handed' (Exhibit 8) use by cyclists to visit various tree sites. The map itself was developed using aerial photographs, and located sites nearby (including Toxic Release Inventory Sites and the habitat of the Endemic Song Sparrow), along with the necessary bike trails. In addition the map is designed to emulate the terrain by the way it is folded as well as elements such as temperature (Isothermal Information). Through this process, GIS mapping information and scientific data about a place is provided in an interactive manner to produce a map that will change every two years to provide updates about the changes in the environment and specifically how the cloned trees are reacting. As Alice Tremlow noted:

"Most maps prioritize expert, institutional knowledge over what Jeremijenko calls "layperson knowledge". The problem with this approach, she says, is that "the questions that are of interest to the experts may not necessarily overlap with the public imagination". In this map, therefore, she mixes "big science" information- such as the satellite photograph, heat, vegetation and topsoil pollution data – with the lay knowledge of bird watching communities. Layers of seemingly incommensurable information are superimposed on one another to suggest new meanings." "Barks to Bites" Alice Tremlow pg 255-256 Else/where: Mapping New Cartographies of Networks and Territories)

With both artists work, using GIS and mapping has become a means to record and illustrate the *everyday* environment that has become the background of our busy lives. The critical issue here is that the process of understanding how we change a place by our actions (i.e. our effects on the Bow and Elbow River and by extension the watershed) is linked to first reconnecting with place itself. The development of public art projects that provide opportunities for this dialogue or act as a springboard for artists to express the complexity of urban impacts on water resources and visa versa is a critical aspect of the project teams focus and generated the impetus of using GIS at a simple level to locate and illustrate existing themes such as open spaces, roads, rivers and population as a way of orientating and selecting potential sites for art and understanding the scale of the City of Calgary and its larger context.

It must be noted that this approach is also an opportunity for artists to utilize GIS information beyond the traditional methods employed by the project team, but explore the vision and themes of the UEP Public Art Master Plan in the same spirit of the artists described in this discussion.

> -by Mark Crisp CH2M HILL



EXHIBIT 6 – *JEREMY WOOD – GPS "DRAWING" IN GREENWICH/MILLENIUM DOME LONDON UK* <u>HTTP://WWW.JEREMYWOOD.NET/</u> EXHIBIT 7 - EXAMPLES FROM JEREMY WOOD (FIELD WALKS) OR MERIDIANS TBC. HTTP://WWW.JEREMYWOOD.NET/

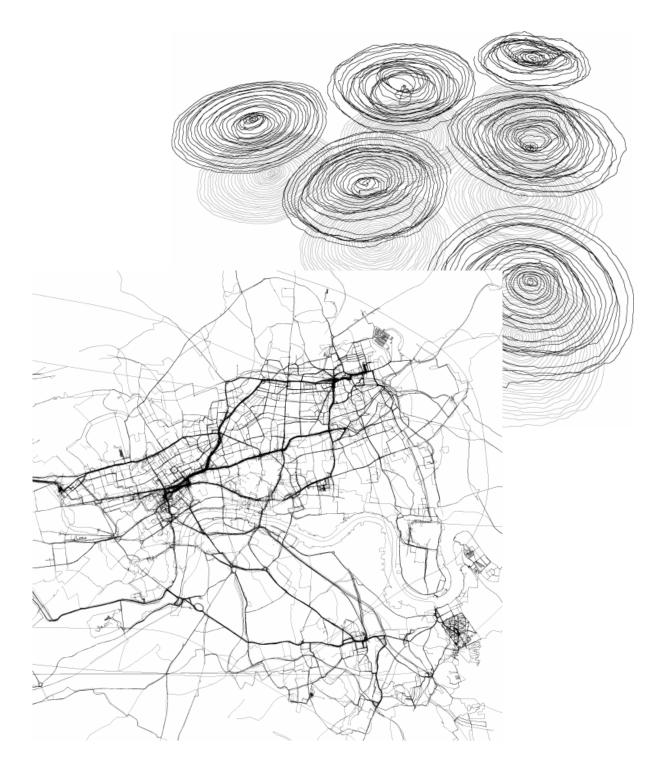


EXHIBIT 8 – NATALIE JEREMIJENKO – ONE TREES PROJECT – EXAMPLE OF MAP – SOURCE: ("BARKS TO BITES" ALICE TWEMLOW PG 254-256 *ELSE/WHERE: MAPPING NEW CARTOGRAPHIES OF NETWORKS AND TERRITORIES*)

