

## The Seven Lochs Wetland Park

Masterplan and Visioning Study

*How can endangered species and landscape be protected, by the formation of a proposed wetland park of international significance, whose very creation is reliant on developer contributions from the construction of new housing within the curtilage of the park?*

Submitted by Nick Walker  
Output No. 1



# OUTPUT

Collective Architecture were appointed by Glasgow and Clyde Valley Green Partnership in October 2010, to undertake a Masterplan and Visioning Study for the area of Gartloch and Gartcosh. The area had formed the basis of a number of studies which provided a detailed understanding of the area's hydrological significance, documented its unique wildlife and heritage, and which investigated the area's potential for new homes. However, all of this work had been undertaken by various independent disciplines, at different times, which lead to a diverse and unrelated series of outputs.

Collective Architecture's remit was to bring all of this information together, to form a single overarching vision for the area as a wetland park, which sought to promote the area's unique character, protect and enhance the existing heritage and natural heritage, and which considered the area as a whole in terms of its hydrology, heritage and recreational importance. As the study progressed, it became evident that integrating development from the outset would help to ensure the success and viability of the proposals for a wetland park. If housing was to be built by private developers on land identified for development, principles could be developed for integrating housing into the park. Working with these principles, developers would realise that integrated design could be achieved without additional cost, which in turn would make their properties more appealing to prospective purchasers.

## Research Question -

How can endangered species and landscape be protected, by the formation of a proposed wetland park of international significance, whose very creation is reliant on developer contributions from the construction of new housing within the curtilage of the park?

Title

*The Seven Lochs Wetland Park*

Submission No.

01

Authors/Creators

*Nick Walker - MSA / Collective Architecture*
*Lizzie Smith - Collective Architecture*
*Nathan Cunningham - MSA / Collective Architecture*


*Diagrammatic plan of proposed 7 Lochs Wetland Park together with photographs of habitat.*

# CONTEXT

The lochs and wetlands which lie within the Gartloch and Gartcosh area, are one of Glasgow and Clyde Valley's hidden treasures. The area includes a diverse range of habitats which support a wealth of important species. Gartloch and Gartcosh are also home to a significant number of cultural heritage sites from the Iron age through to remnants of the area's recent industrial past.

The Seven Lochs Wetland Park masterplan and visioning study puts forward proposals for a new wetland park of national significance to the east of Glasgow, and to the west of Coatbridge. The site of the proposed wetland park is a 20 square kilometre area which lies within the boundaries of both Glasgow City Council and North Lanarkshire Council. The park offers an innovative model for a park, with its unique combination of habitat and wildlife preservation, opportunities for recreation, and the integration of new housing.

The surrounding communities have been identified as areas of significant deprivation. Glasgow and North Lanarkshire Councils have sought to encourage inward investment through the creation of a number of Community Growth and Business Enterprise Areas.

These initiatives focus on housing renewal and socio-economic development. However, the councils also recognise the need to protect and enhance the natural and cultural assets as part of the regeneration process, as well as the opportunities for health and well being afforded by the potential to engage the surrounding areas of deprivation with the lochs and wetlands.

*'The vision is to create a new wetland park of national significance between Glasgow and North Lanarkshire, and to deliver, manage, and sustain a high quality innovative wetland environment that will protect and enhance the biodiversity of the area as a national resource that promotes the general health and wellbeing of both visitors and residents alike, and contributes to the environmental, economic and social regeneration of the area.'*

The park's main roles, as an ecologically diverse wetland sustaining and protecting a range of habitats and species, and as an attractive and accessible recreational resource will only come into being as a result of the construction of approximately 4000 new homes in both Glasgow City Council and North Lanarkshire Council.



Location and context for 7 Lochs Wetland Park

# CONTEXT

The Seven Lochs Wetland Park lies within the area designated for the Glasgow and Clyde Valley Joint Structure Plan 2006, which proposes the creation of a 'Green Network' to manage and link green spaces. The plan aims to enhance the quality of life in communities within the area by improving green assets through the use of unused or derelict land for community benefit.

The main context within which the wetland park is situated is green belt and countryside, with an emphasis on the protection of environmentally designated sites. Community growth areas (CGAs) have been identified in and around the proposed wetland park by Glasgow City Council and North Lanarkshire Council, to deal with the anticipated shortfall in available housing. In addition there are a number of proposed private developments.

Central to the success of the proposed park is the integration of the proposed CGAs, private developments and a proposed new road. The boundary of the wetland park has been carefully considered to include the proposed CGAs and other private developments that lie towards its edges, to ensure that a high standard of design and sensitive integration into the park is achieved.

The areas of Gartloch and Gartcosh have been offered a temporary respite from overdevelopment as a result of the economic recession. A number of housing developments were completed before the downturn which demonstrate the lack vision exercised by developers, who on the one hand exploit the location, whilst at the same time completing turning their backs on the opportunities the wetlands afford.

Developments address the wetlands with high timber fences, which block off any visual connections, as well as opportunities for recreation and species movement. Roads are located in confusing cul-de-sacs ring fenced within the housing, disconnecting the housing from its surroundings and context.

Lack of vision on the part of housing developers extends to the integration of the requirements of sustainable urban drainage (SUDS). Whilst these could offer up genuine habitat and species opportunities, most developers treat SUDS as a planning hurdle, which can be dealt with by the creation of isolated and sterile kidney shaped SUDS ponds.



*Proposed areas for CGAs, private developments and new road, together with examples of existing housing.*



# CONTEXT

The Seven Lochs Wetland Park Masterplan and Visioning study addresses the issue of development by integrating the proposed community growth areas and private developments within a clear strategy linked to recreational opportunities, and habitat and species preservation, as well as putting forward proposals for a positive engagement with the hydrological restrictions of the Gartloch and Gartcosh area.

Community growth areas, through reference to Scottish Natural Heritage's Integrated Habitat Network Model, were identified as areas of considerable opportunity for the growth and enhancement of habitat and species movement within the park.

Development related to community growth was strategically integrated into the park within the masterplan, by acknowledging the sensitivity, location, landscape and character of each individual area. Although it is anticipated that the CGAs will be privately funded by developers, their inclusion within the wetland park will ensure that clear design guidelines for developers are set out from the start, with an ambition to create exemplar integrated new housing with both Glasgow and North Lanarkshire's governance.

Developer contributions will act as a key revenue source towards maintenance and management of the park facilities.

The strategy for development within the wetland park focuses on an Integrating Green Infrastructure (IGI) approach, a design technique that responds to the natural topography of the site, existing habitats and habitat connectivity, access networks and existing hydrological elements, to identify opportunities to incorporate green infrastructure with multiple functions within developments. It makes use of swales, planted 'green' and 'blue' corridors and retention areas to manage surface water, whilst but links paths, natural habitats, play areas and amenity spaces with these to ensure the benefits of green space and green networks are maximised.

The benefits of the IGI approach include a reduction in flood risk, the incorporation of sustainable construction techniques, a reduction in long term maintenance costs, a buffering between urban form and the existing environment, and the integration of accessible networks and open green space into development for both human recreation and well being, as well as species movement.



*Development areas in relation to visitor gateways and recreational facilities. Integration of development.*

# METHODOLOGY

The Design Process involved the following tools and procedures -

## Information gathering and interpretation -

Topographical surveys, LIDAR & GIS, Integrated Habitat Network Modelling information and OS information were gathered from Glasgow City Council and North Lanarkshire Councils, together with a number of other related sources. Desktop information gathering was carried out in conjunction with a series of detailed site investigations to record and interpret information at grass roots level. Information was then assessed, distilled and compiled in order to form the basis for design drawings and study findings.

## Policy and Advice -

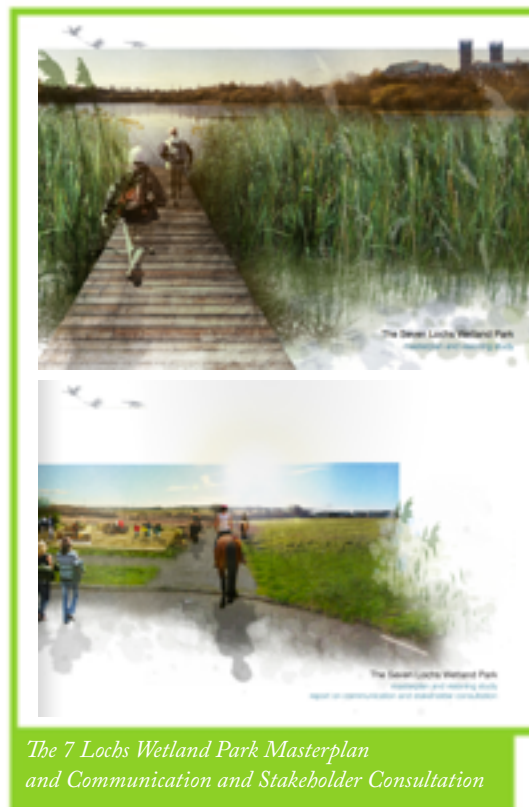
The masterplan takes cognisance of key Scottish Government and Local Government policy documents, together with a number of detailed reports relating to the area, carried out by a variety of consultants. The wealth of information contained within these documents and reports informed the development of the masterplan and vision for the area. The masterplan incorporates community growth areas and core path strategies identified by both Glasgow City Council and North Lanarkshire Council.

## Working with Consultants

Collective Architecture employed Aecom as sub consultants to provide specialist input in relation to ecology and GIS information interpretation. Brown + Wallace and MCM Associates were also employed as consultants to provide costings input and a Business plan. In order to ensure clear and coherent input, a series of Constraints and Opportunities workshops took place, both within the office environment as well on site. These ensured that ideas and information were quickly shared and investigated between the different disciplines.

## Stakeholder Consultations

During the course of the Study Constraints and Opportunities and Progress Reports were also programmed to involve the Steering Group at specific points in the development of the study. This not only provided Collective Architecture with an opportunity to keep the members of the Steering Group abreast of progress, but also provided an opportunity to obtain information from the various members of the Steering Group, which may not have been forthcoming previously.



# METHODOLOGY

The Design Process involved the following tools and procedures -

## Precedents and Comparison

Existing wetland park precedents were researched as part of the study in order to inform approaches to landscape and species preservation. Wetland parks are generally designed to combine wildlife and habitat preservation. Those that place a strong emphasis on recreation and education alongside nature conservation and interpretation tend to be the most successful. Some wetland parks also place a focus on economic regeneration, both within the park area itself, and more widely within surrounding communities.

Wetland focused parks range from large parks with regional status, such as the Colne Valley Regional Park to the West of London, and the River Nene Regional Park in Northamptonshire, through to smaller wetland centres such as the Slimbridge Wetland Centre on the Severn Estuary, the Dams to Darnley Country Park and the Flanders Moss National Nature Reserve.

## Community Stakeholder Consultations

Further to the completion of the Draft Report Collective Architecture were commissioned by Glasgow and Clyde Valley Green Network to assist them in undertaking and documenting a series of consultation, as well as providing information for a consultation website.

A series of community engagement workshops took place over the course of 3 months, with members of the locale community, landowners and stakeholder. Presentation boards and booklets were produced, and attendees were encouraged to leave their comments by way of 'post it' notes. These comments were collated and recorded by way of the Report on Communication and Stakeholder Consultations.

The findings were discussed with the client, which in turn lead to significant revision of the draft report, culminating in the completion of the Final Report in the spring of 2013.



# METHODOLOGY

## Conclusion

The Seven Lochs Wetland Park Masterplan and Visioning Study is an award winning exemplar project which provides a clear approach to the integration of development into proposals for a wetland park of international significance. This has been arrived at by way of the interpretation and re-presentation of significant bodies of existing information into an accessible vision for the viable development of the Gartloch and Gartcosh area.

The masterplan demonstrates that, with integrated and strategic planning, heritage, landscape, habitat and species can be protected in tandem with the development of new housing and infrastructure projects. Indeed the formation of the park is reliant on development for it to become a reality. Without the cooperation of developers as part of the overall vision for the park, Gartloch and Gartcosh will remain unprotected, and will be slowly and incrementally destroyed by piecemeal development for profit alone.

Collective Architecture are currently in the process of undertaking an additional green network and green infrastructure planning study with Glasgow and Clyde Valley Green Network Partnership to investigate a number of the proposed community growth areas in more detail. The study will aim to provide clear spatial plans which recognise the constraints common throughout many of the CGA sites including road and rail infrastructure, pylons, and gas main lines and their associated buffer zones. Adjacent SINC, SSSI, SSLI and LNR designations also provide a unique mix of spatial constraint, along with opportunities for outstanding environmental quality to be on the doorstep of new communities.

The study involves consulting directly with the companies who intend to develop these areas once the economic climate has improved. It is anticipated that this approach of direct consultation accompanied by detailed planning studies, will ensure that developers are provided with clear evidence that Integrated Green Infrastructure approach will not increase costs and will ultimately make the homes they intend to sell more marketable and profitable.

*'The same area of land can frequently offer multiple benefits if its ecosystems are in a healthy state. Green Infrastructure investments are generally characterized by a high level of return over time, provide job opportunities, and can be a cost-effective alternative or be complementary to 'grey' infrastructure and intensive land use change. It serves the interests of both people and nature.'*

European Commission -  
Extract from Green Infrastructure Strategy



*Quote and example of multi functional space*



# DISSEMINATION

## Dissemination

### Public Lectures:

Urban Design Group Scotland  
7th March 2012 - Glasgow

MSA Research Symposium  
Mackintosh School of Architecture  
7 March 2013 - Glasgow

### Articles -

Architecture+Design Scotland Website  
11th November 2011 - Caroline Ednie  
Article - <http://www.ads.org.uk/access/noticed-board/7-lochs-wetland-park-masterplan-2>

### Abstracts -

Paper Accepted for Masterplanning the Future  
Conference - Xi'an Jiaotong-Liverpool University  
Suzhou, Jiangsu Province, PR China  
18th - 19th October 2012

### Websites -

[www.gcvgreenetwork.gov.uk/seven-lochs/seven-lochs-wetland-park/vision-and-masterplan.html](http://www.gcvgreenetwork.gov.uk/seven-lochs/seven-lochs-wetland-park/vision-and-masterplan.html)

<http://www.collectivearchitecture.com/projects/7-lochs-wetland-park>

## Reports

Masterplan Report -  
<http://issuu.com/gcvgreenetworkpartnership/docs/120815145940-b9e507d9d9614bb4bc64dbc593e1b47e>

Consultation Report -  
[http://issuu.com/gcvgreenetworkpartnership/docs/wetland\\_park\\_-\\_masterplan\\_consultation\\_report\\_os](http://issuu.com/gcvgreenetworkpartnership/docs/wetland_park_-_masterplan_consultation_report_os)

## Impact

### Esteem Indicators

- . 2012 Scottish Design Awards  
Placemaking / Masterplanning Award
- . 2011 Roses Design Awards  
Placemaking / Masterplanning Silver Award



*Visions for the 7 Lochs Wetland Park*

## Acknowledgements

### Client

Glasgow and Clyde Valley Green Network Partnership  
International Resources and Recycling Institute

### Steering Group - Gartloch Gartcosh Strategic Delivery Partnership

Glasgow City Council / North Lanarkshire Council  
Glasgow and Clyde Valley Green Network Partnership  
Scottish Natural Heritage  
Forestry Commission Scotland  
Scottish Government's Housing and Regeneration Directorate  
Royal Society for the Protection of Birds  
International Resources and Recycling Institute

### Funding

Part of the SIGMA for Water programme funded by the INTERREG IVC program. INTERREG IVC provides funding for inter-regional co-operation across Europe. It is implemented under the European Union's territorial co-operation objective and is financed through the European Regional Development Fund.

### Project carried out with Collective Architecture

Nick Walker / Lizzie Smith / Nathan Cunningham

The project was carried out with GIS interpretation and Ecology input from Aecom and Cost Consulting by Brown and Wallace. A business plan was developed by MCM Associates as an accompanying document.



The Scottish Government



European Union  
European Regional Development Fund



RESEARCH EXCELLENCE FRAMEWORK 2014