Gardens

Submitted by Lorna Jordan Inc., Seattle
Waterworks Garden, a public space integrated into an otherwise ordinary water treatment facility in Renton, Washington, demonstrates a remarkable combination of experiential, eco-conscientious and didactic qualities.

The eight-acre garden, completed in 1999, was created by artist Lorna Jordan and built by Metro, the agency that handles water treatment for the Seattle region. It consists of stormwater treatment ponds and wetlands designed as an earth - water sculpture that funnels, captures and releases water.

The project's multiple accomplishments include the natural treatment of stormwater, the enhancement of two on-site wetlands, and the creation of five garden rooms for the public. This last aspect is perhaps the most important given the fact that this industrial site sits amidst a business park, quarries, shipping companies, residences and a former sawmill.

The garden rooms invite people to observe the natural processes of water purification while connecting them to the cycles and mysteries of water. Stormwater runoff from the grounds of the wastewater reclamation plant is collected and pumped into eleven ponds that settle out contaminants and sediments. Water is then released into the wetland below, helping to sustain plants, micro-organisms and wildlife.

Jordan developed the conceptual framework of the garden because she considered it to be a balancing point between nature and human presence. The garden demonstrates a level of in-depth research into the fields of gardens and indigenous plant material, water treatment technology and recycled materials.

Waterworks Garden may be the first attempt to integrate an arts project with a water treatment plant, and the story of how this came to be demonstrates the artist's commitment and perseverance. In fact, Waterworks Garden was not developed as the typical "per cent for art" project; rather, it was an artist-initiated project from the very beginning.

In 1997, Jordan advocated that a "people place" should be carved out of the ninety-five acres that Metro purchased for the King County East Section Reclamation Plant. More than anything else, Jordan wanted to move beyond an earlier design effort, which had proposed that a wall of trees be planted at the perimeter of the plant to hide it. The Metro Arts Committee also believed that a more innovative solution could be reached if a strong design team were assembled.

As the artist member of the design team, Jordan advocated for a natural system treatment of stormwater that collected on the site. This was not met with total agreement at first, but when the plant's building permit required complete drainage of the site's stormwater, due to the impermeable cover the treatment plant would require, the project came closer to reality.

It took the joint efforts of Jack Warburton, the consultant team lead engineer, and Bill Burwell, the treatment plant manager, to reach the decision to merge the stormwater budget with an already allocated art budget.

Construction began in 1998 and groundbreaking took place in June of 1999; the total cost of the project reached $1.6 million, an amount not far from what a percent-for-art project might have yielded. But the development process here was a completely different experience. Waterworks Garden went through an incubation period of eight years, and this allowed Jordan to retain a number of elements in the project quite extensively; it was clear from the outset, the artist has commented, that the media and science at hand were not part of her usual palette.

The story of how Waterworks Garden came to be sited at the northern border of the plant reveals how an unexpected challenge became an important part of...
the design solution. Early on, Renton’s city examiner had deemed that the stormwater runoff from the treat-
ment plant was to drain into Springbrook Creek on the
north side of the site, rather than into the Green
River, where the treatment drains were already carry-
ing water runoff. To do this, a channel and pump had to
be installed to redirect this runoff to the opposite side
of the site.

Jordan capitalized on this opportunity and devised
a scheme whereby water pumped to the top of the hill
could be re-directed down into the wetlands, a work of choreography that inspired the five outdoor
rooms she developed. Jordan explained that “the pro-
gression of five garden rooms intimately engages visi-
tors and follows the story of the water’s cycle: impure,
working, mysterious, beautiful and life-sustaining.”
The spaces are:
The Knoll, where stormwater splashes into the open
system of ponds. The first stormwater treatment pond
is framed in forced perspective by ten standing balau
columns, and the wetlands that culminate the process
can be seen from the outlook.
The Funnel consists of a series of terraced ponds that
emphasize the role of plants in purifying the water.
At the bottom of the hill, cleansed stormwater cas-
cades into The Grotto, which is designed as a dank, fer-
tile environment.
The Passage evokes a sense of calm as the path passes by
a row of Lombardy poplars and three circular ponds
that symbolize the fruit of the plan.
In The Rebank, cleansed stormwater passes from the
pond system to the wetland and then from the wetland
to Springbrook Creek.

While the gardens do not instruct the visitor about the
more complex technology required in the treatment of
wastewater in the reclamation plant, it is a totally
separate facet of experience, the presence of the
adjacent tanks and digesters that do this job are cer-
tainly part of the garden ground’s experience. The
reciprocal to this is that planned tours of the reclama-
tion plant include the Waterworks Garden, and this
helps to inform the visitor about multiple forms of
water treatment.
Waterworks Garden’s tactile qualities express the inte-
gration of both recycled and indigenous materials and
ornaments. Recycled glass cullet was used for drainage
aggregate throughout the garden, and the grotto was
built with eighty-five-percent recycled granite and
marble; recycled concrete from nearby sites was also
used for structural fill. The artist also used a product
called Gro-Co, a manufactured soil amendment, which
is made from sludge (a by-product of the treat-
ment plant) that is then mixed with sawdust.

The use of natural material was inspired by the four
elements: earth, wind, water and fire, which the artist
integrated into the project. Fire inspired the choice of
the primary stone, described by the artist as a firey-
looking, almost sinched red quartzite. Water is cele-
brated in the underground watecourse, which runs
through the formal geometry of the first garden room;
here, the sound of the water underfoot is meant to lead
the visitor out onto the overlook. The natural setting
brings the elements of earth and wind into the experi-
nence, primarily with indigenous plant material. Red
Cedar, Douglas Fir, Quaking Aspens and Wax Myrtles
are arranged in broad bands that create moments of
intimate space and then vast openness. Plant material
is irrigated by tertiary water that comes from the adja-
cent treatment plant.

Bob B. Gonzalez

Jury Comments:
Lawrence Halsey: This is an example of how one
can take a very difficult necessary function in a city or
a region, which is usually considered some sort of
blight on the landscape, and turn it into a great work
of art. It is clear that the project was developed so that
one can interact with the industrial aspect of the site
without feeling like they are excluded from this type
of facility.
Samantha Kurashki: I think Waterworks Garden is an
element of imaginative and original design work.
What a wonderful use of materials. It is interesting to
see the variety of ways that this project is made accessi-
ble to people.
Dorothy Lyndon: The garden is an example of how
a set of processes that are interesting and valuable
can be dealt with in an explicit and comprehensible
way. The designer then goes beyond just engineering
the treatment process and makes a place that
is understandable.
Gary Hack: Usually this work remains in the realm of
engineering and gets treated as dumb environments,
and to hear that someone has made this into a piece
of public art is remarkable.

Photo: Lorna Jordan

The Funnel consists of a series of terraced, leaf-
shaped ponds connected by a path, or stem.

The Grotto, shaped as a seed pod, provides a
point of respite.

The Passage is a path that passes by a
row of Lombardy poplars and three circular ponds.