

# Betsy Damon: Knowing Water

Water is a human right, an earth right. Water is the right to life. Water ripples, splashes, soothes, sings, meanders, pounds and thunders. Water is perhaps the most aggressive creative force on earth. It is the foundation of life.

## Knowing Water

For nearly 30 years, water has been at the heart of my art practice that now spans continents. It began during a cross-country trip in 1984 when I saw the beautiful and disturbing dry riverbeds of Utah. They inspired my first major project "A Memory of Clean Water," a handmade 250-foot paper cast of the Castle Creek riverbed in Utah. At the end of a day of casting the river, I noticed that the patterns of the stars mimicked the patterns of the stones in the dry riverbed. With this, I realized that everything is patterned by water.

I discovered that in this sparsely settled valley, the waters were polluted from mining and agricultural runoff. Immediately I recognized this as a crisis. At that time I knew nothing about water. So I resolved to learn everything about this substance and our relationship to it.

I read books and went to conferences. The predominant issue that people focused on were about pollution and the chemicals used to clean water. I wanted to understand water at a fundamental level. How does the water molecule function? How important is water quality to the quality of life? What is living water and how do we keep our waters alive? I knew that water and life are inextricably connected and that water has a biodynamic relationship with nature. I wanted to understand this phenomenon.

It occurred to me that people who lived close to nature would have a deeper understanding of water, thus I looked towards indigenous American groups. Unfortunately the loss of oral histories made this knowledge difficult to find. Nonetheless, I discovered several water sites that held special meaning to local Native American tribes. The headwaters of the Sacramento River, located on Mt. Shasta in California, are a site protected by the tribe that lives in the mountains. Havasupai Falls in Arizona was kept secret by the local native tribe, but is now a tourist destination. In San Antonio, the Blue Hole was a site visited every spring by indigenous people.

In 1991, I visited my son who was a college student in China. By sheer serendipity, I met a biologist who had just completed research on a Tibetan water site called the God Water. Here, the waters help heal digestive problems and tumors. Chinese medicine is often prepared with water, and traditionally the source of the water was important. Particular water sources were known to enhance the healing properties of certain herbs. Water quality was inextricably linked to health.

Two years after this meeting, I attained a grant to visit the God Water site. When I drank the water, I felt the cells in my body open. So, this is "living water," I thought. At that time, a bottling company was sourcing from the God Water to sell the water for its healing properties. This endeavor failed as the water lost its medicinal value in plastic bottles and glass bottles were too heavy to transport. Consumers rarely know what happens at water-bottling sites or who else may depend on that water source. The water-bottling efforts at the God Water site failed, and it was returned to the local Tibetan groups who still use it for health. Although this site is not officially protected from overuse and abuse, it is still protected by those who collectively have the rights to use the area.

## Living Water Garden

Shortly after being at the God Water sacred site, I attended the first environmental conference in Chengdu, Sichuan Province. Remarkably, along with engineers, Qigong experts attended. This epitomized the interconnection the Chinese culture found between the environment and health. This conference was a stepping-stone to my collaboration on several large-scale public performances on water quality with Chinese and Tibetan artists. It also led to an invitation to design a park that would teach people how nature cleans water.

The Living Water Garden, a six-acre (2.4 ha) public park located on the Fu and Nan rivers, was the first inner-city ecological park with water as its theme. It includes an environmental education center, several water features and a refuge for wildlife. Each day, 200 cubic meters of polluted river water moves through a seven-stage wetland-based treatment system and emerges clean enough to drink. Although this amount of water does not affect the quality of the nearby rivers as a whole, it serves as an effective demonstration project. The entire park is in the shape of a fish, a symbol of regeneration in Chinese culture. I was the Director of the project, however, everyone who worked on the Living Water Garden was encouraged to take ownership. Many people on the team have gone on to do sustainability work near Chengdu.

After the Living Water Garden, I worked on a design team for the Olympic Park in Beijing. The Living Water Garden had demonstrated the public value of wetlands in China. This initiated a national dialogue on the benefits of designing using natural systems. Our design team was able to integrate an extensive urban wetland system into the final design of the Olympic Park.

## ReSources: Saving Living Systems

In 2007, I began “ReSources: Saving Living Systems,” a collaboration with a Tibetan media artist. In the Eastern Himalayas, Sichuan China, we have documented nearly 40 sacred water sites and their accompanying local stories. Much like the indigenous people in the United States, the Tibetans also attributed cultural value to their waters. The Tibetans know which water sources have medicinal properties. Some are said to be good for your heart, others for your kidneys. Each source has a distinct medicinal function. In some villages, knowledgeable doctors will prescribe water from particular springs to cure illness, and many monasteries in this region are founded on such medicinal sites. People make pilgrimages to certain springs in the summer time. While some of these sites are easily accessible, others require travel into remote areas with few paved roads.

Most of these water sites have a founding story, directions for using the waters and strict rules for protection. One story I particularly like surrounds the site called the Butter Water. In this narrative, a weak and starving slave is walking to her next master. When she declares she can't go on, her three-year-old son suggests she drinks from the spring, the Butter Water. Despite her doubt, she drinks the water, and gains remarkable strength. Today, a nearby monastery protects the Butter Water site.

Many sites have unique forms of protection. One spring has a sign warning people not to bathe on threat of getting arthritis. Another site has a painted red symbol on a large rock, and people know not to graze their cattle or cut down the trees. Trees play an important part in maintaining a water source. I visited a monastery where the springs dried up after a nearby forest was harvested during the Cultural Revolution. The head monk chuckled when I asked what brought back the waters. He answered that they had replanted the trees. These stories and precautions represent a whole-system understanding of the impact of human interference.

While researching for “Resources: Saving Living Systems,” I would stay in villages and monasteries where we learned of water shortages caused by extensive river damming and nearby urban development. These sacred water sites and the culture surrounding them are threatened by globalization and industry. Documenting these sites is one step towards learning about a water culture that is disappearing. When it is gone, what can we replace it with? If there is no replacement, what is in store? This traditional culture must make adaptations, start to collect rainwater and find ways to recycle their wastewater.

## Living Waters of Larimer: A Fresh Infrastructure

Today, I am working in Pittsburgh, PA on a community project called the “Living Waters of Larimer: A Fresh Infrastructure.” It places rainwater as the foundation of a community's redevelopment and empowers citizens to imagine what is possible.

Larimer is a predominately African American neighborhood that has suffered decades of disinvestment as Pittsburgh's economy shifted away from steel. It's situated on a plateau, surrounded by two rivers buried by urban development. As I spent time talking with people in the neighborhood and local businesses, I came to see how bankrupt the system is that purports to serve challenged communities. I asked people what they imagined for their community, what they wanted to happen there.

I didn't come to solve housing or economic problems. I was there to think about their water infrastructure. But these problems are not distinct. Urban planning often considers storm or rainwater as waste not a resource. Nearly 80 million gallons of rainwater fall on the Larimer Plateau each year. It seeps into the ground, flows along roads, overflows the sewer systems and overruns Pittsburgh's antiquated water infrastructure. The rainwater could be an asset, a chance for people to live off their own footprint and have access to a resource without charge.

I try to be honest about the role I play. I am a white woman, who is not from Pittsburgh. My role is to give information and foster community participation to open the possibilities to what can be done. I find local experts. I search out people who are interested in organizing and contributing, and I support their leadership.

I asked eco artist Bob Bingham, a professor at nearby Carnegie Mellon University, and two community groups, the Larimer Green Team and Kingsley Association, to collaborate. The community groups saw the opportunity that rainwater provided and asked how it could help fuel businesses, jobs and community projects. They have created plans for self-sustaining urban and medicinal gardens, papermaking businesses, hydroponics, and public water features. Rainwater as a resource provides a flexible and resilient foundation for future development. Larimer can be a model of water self-sufficiency.

"Living Waters of Larimer" is the community's project. Four people attended our first workshop. Nine months later, we had 40 attendees. We are headed towards doing a comprehensive infrastructure plan with the community as fully involved in planning and design as possible. It will face many challenges. Yet, even if 50% of the plan is implemented, it will be 50% more than any other Pittsburgh neighborhood.

In Larimer and elsewhere, the destruction of our water systems is familiar news. Rivers are constricted, dammed and diverted. Water is a commodity. We are in a struggle to save life on earth in the face of human greed. Linear thinking and planning has created inflexible, unsustainable infrastructures. My work as a social practice artist is to find an alternative relationship with our water that will allow us to build sustainable infrastructures that are so deeply needed.



# 贝茜·达蒙:认识水

人类有权享用水资源，地球也是；世上万物都有权利使用水资源。水波涟漪，水花飞溅，水声轻唱，水流蜿蜒，雷霆万钧。水是地球上最有生命力的源头，乃生命之泉。

## 认识水

行近30年，水是我的艺术创作重心，现在它延伸到国际。这是从1984年一趟环美的旅行开始。当我看到犹他州美丽的河床乾枯时我十分担忧。这个经验导致我创作了我的第一个大型的企划案：“净水之忆” - 我用纸包覆犹他州的城堡溪(Castle Creek) 7.62公尺长的河床。在一整天以纸铺设河床後，我发现到在乾枯地河床上星星的痕迹彷彿沿着石头轨迹移动。以此，我了解到其实所有的轨迹都是由水刻画出来的。

我发现就算在这个人烟稀少的溪谷里，水也都被矿工业和农业给污染了。马上我就了解到这是一个危机。那时我没有任何与水相关的知识，我便去学习所有与水相关的事物还有人与水的关系。

我努力研读也参加了许多的会议。人们优先考虑的问题是水污染和清净水质的化学药剂。但我想要从基础去了解水。水在分子上的根本是？水质的重要性与生活的品质有多少相关之处？什麼是活水而且我们要如何让保持水活？我知道水和生活有密切的关系而且与自然有影响生物动力。我想要彻底去了解这个现象。

了解到与自然习习相关的人们对水有比较深地认识，以此我希望能与美洲原住民团体一起合作。很不幸地，口述历史的失传让我很难找到与水相关的历史。但是我发现到有許多原住民部落对水都有特殊的感情。在加州沙斯塔萨克拉门托河的水源头是一个由山中部落保护之地。在亚利桑那州的哈瓦苏瀑布原本也是由当地部落隐藏着，如今却变成了观光客目的地。在圣安东尼，蓝洞原本也是每个春天原住民的参拜之地。

在1991年，我拜访了我在中国念大学的儿子。靠着纯粹的运气，我碰到了一位生物学家，他才刚结束一个西藏人神泉水址的研究。在此地，水可以治疗消化不良和癌症，中药也大多是由水炖煮。传统上水是很重要的。好的水质会增加草药的疗效，水质与健康也有直接的关系。

在这个机会後的两年，一个艺术补助金让我得以拜访神泉。在我喝了水後，我觉得身体里的细胞都打开了。我想：所以这个就是“活水”。在那个时候，有一个公司将神泉装售并作为医疗用途。这项工作因为使用塑胶瓶而破坏了水的医疗效用。而改用玻璃瓶却又因为玻璃太重而无法运输。消费者很少能知道有关瓶装的过程，也不知道还有谁依赖此水源生活着。这个装神泉的举动失败後，水源由当地西藏人收回了。虽然神泉并不是正式地被保护着，但它仍旧被当地人去使用，以免他人滥用及破坏。

## 活水公园

在拜访神泉短暂待的时间後，我在四川成都参加了我第一次的生态保育研讨会。异如往常地，气功师和工程师一起参加。这强化了中华文化环境与健康的關係。这个研讨会一个让我与其他许多中国和西藏的大型公共表演艺术家或是水质艺术家一起合作的垫脚石。之後也代领我一个参与公园的设计案的机会，并教导民众如何清净水源。

活水公园，座如其名。一座在府南河旁六英亩(2.4公顷)的公园。是第一个建设於都市里的生态园区。公园里包含着环境教学园区、水景、还有野生保育区。每天有200立方的水经过7层湿地过滤系统然後涌出足以生饮的水。虽然说这个水量并不足以影响所有附近的水质，但它却形成了一个很好的示范。整个公园设计成鱼的形状，鱼在中国文化里具有再生之意。我身为项目住任，我鼓励每一个参与活水公园的人都应该自由发展长才。许多在团队里的人都继续留在成都附近持续重事永续发展的工作。

在活水公园计划案之後，我在北京奥林匹克公园做设计师。活水公园更证明了在中国里湿地的公用价值。此开启了全国利用自然系统的议题。我们的设计团队最後更进一步地在奥林匹克公园里建设一个大型的都市湿地系统。

## 回复资源：拯救活水系统

在2007年，我开始了与西藏的媒体艺术家合作“回复资源：拯救活水系统”企划。在西马拉雅山东边，中国四川，我们记录了40组神圣的水址并收集当地传说。就像美国的印第安人一样，西藏人也认为水是他们文化之一。西藏人知道哪个水

源有医疗效果。有些对心好，有些对肾好。每个水源都有其特殊的医疗用途。在某些村落里，医者会指示饮取特殊水源以治疗病痛，在这个地区里有许多水源因其医途而在一旁设立寺庙。在夏天里有许多民众会来此朝圣，有些地点容易到达，有些地方则需要走一段路。

这里大部份的水源都有自己的传说、方向导览和严格的管制。有一个故事我特别喜欢叫做“黄油泉”。在故事里一个饥饿的奴隶在她的主人身旁伺候。当她累到走不动的时候，她3岁的儿子叫她去喝那个黄油泉，虽然她很疑惑，但她仍旧听了她儿子的话喝了那水，后来获得了无比的力量。现在，在这水泉旁也有寺庙守护着。

许多位置都有独别的保护方法。一个水泉上面注明着关节病痛患者请勿洗澡，另一个泉址上则有一块涂着红色的标识的巨石。人们也知道水源处不可以放牧或砍树材。树是保护水资源中重要一环。我拜访了一个寺庙，他们的水源在文化大革命时因为砍收树林而乾枯。当我问住持要如何重新活化水源时他只是抿嘴一笑。他说他们必须重新种树。像这样的故事和注意事项呈现着人类影响整自然环境。

当我们研究“回复资源：拯救活水系统”时，我学习到水源的短少是因为广河筑坝还有都市发展所造成的。因此我们同夥只居住在村落和寺庙里。这些神圣的水源和文化却被全球化与工业化所威胁。记录这些事情迈向了学习水文化消失原因的一小步。当水消失了，我们要用什麼来替换呢？如过没办法替换，那我们未来将何去何从？传统文化必须有所调节，学习收集雨水并寻找回收废水的方法。

### 拉里默的活水：新的基础建设

现今，我在宾夕法尼亚州的匹兹堡从事“拉里默活水：新的基础设施”社区计划。这计划案主要是将雨水收回作於社区重用用途，并赋予公民权利去实现梦享。

拉里默是非裔美国人社区，十几年来因匹兹堡钢铁业的撤资而遭遇经济衰条。拉里默是一个被两条河川包围的高原，其为都市所掩盖。当我与当地居民和商家谈话後，我发现对社区营造挑战的主要是经济破产。所以我寻问当地居民，他们想要怎样的社区、有什麼愿望。

我不是来解决住屋或经济问题的，我来这里主要是为了水的基础建设。但这些问题并没有明显的分隔线。都市规划通常将暴风雨及雨水视为废水而不是资源。每年都有将近8千万加仑的水下在拉里默。这些水渗入地底、淹没道路、泛滥地下水道，超出匹兹堡里的老旧水道设施限制。雨水是可使用的资产，是时候人们活在自己走过的轨迹并使用免费的资源。

我试着诚实地面对我自己所扮演的角色－我是个白人女性，也不是匹兹堡的当地居民。我是提供消息和促进社区参与并开阔可能性的人。我找到许多当地的专家。找到当地喜爱组织和推动建设的人，而我做主要协助。

我询问生态艺术家鲍勃·宾汉姆、在附近卡内基-梅隆大学教书的教授、两个社区团体、拉里默的绿色团队、以及金斯利协会一起合作。社区团体发现雨水所提供的可能性，并查询它如何能帮助燃料业、工作机会和社区计划。他们设计了自给自足的城市计划、药用花园、造纸工业、水耕及公共水景。雨水提供了灵活和弹性未来发展基础。拉里默可以变成水自足的表范。

“拉里默活水”是一个社区计划。在第一次的工作营里有四个人参加，九个月过後增加到四十位成员。我们朝着实行全面性的基础设施，如果可能希望包含全面性的社区设计和参与。这将会面临许多挑战，但是，就算只有50%的计划被执行也等於说有50%多的设施可以被匹兹堡的居民所使用。

在拉里默或其他区域，水源被破坏是很常见的。河流被压迫、截流及改道。水被拿来贩卖。我们在人类的贪婪中试着拯救地球的生命。直线性思维及计划制造出硬性或非永久性的建设。身为实践性的社会艺术工作者，我的工作找到水和人类关系的替代方案，这让我们能够建造一个我们真正需要地永恒发展设施。