



President's Message by Pat Brooks

Clean drinking water is something most of us take for granted, but for some it's a luxury just out of reach. **Aqualink Water Systems** evolved as a group of adventure-minded volunteers with a love of Baja California, and the ability to help small villages develop and manage their water supplies. We share our expertise to improve drinking water

conditions in small Baja California communities. That is the core value of our volunteer group.

Even in the 21st century, there are people in Baja who collect drinking water with a bucket from a stream, or rely on a patchwork system of piping to deliver water from a spring. Some communities are located so far from the power grid, that we have introduced solar power.

We volunteer our ideas, time, and labor, and we help raise funds to support the projects. Part and parcel to developing drinking water supplies is managing wastewater, and we do that, too.

Our group works closely with the **Native Cultures Institute** and the **Office of Social Development** in Ensenada to identify potential projects.



Volunteers John Peterson and Kaare Kjos confer with a villager at Flores Magon

Once these conditions are met, we are off and running. Many of us manage projects like these in the private sector, but without the challenging prospect of raising funds. Financial support comes from volunteer groups such as the **Kiwanis** and **Rotary**, engineering firms like **Bechtel National**, from individuals, and from the community.

Volunteering is not always easy, almost by definition, but in our experience, it has always been rewarding. Our latest project is in the **Kumiai** community of **San Antonio del Necua**, in the Guadalupe Valley located northeast of Ensenada. It will involve well drilling, water storage, and distribution piping. The project is just beginning, so if you are interested in helping, please let us know.

More about Aqualink inside...

For a project to be considered viable, the community must meet the following threshold criteria:

- Hold clear title to the land
- Request Aqualink involvement
- Agree as a community to the project goals and objectives
- Take part in project planning, funding, and construction
- Operate and maintain the system with minimal Aqualink support.

"We share our expertise to improve drinking water conditions in small Baja California communities. That is the core value of our volunteer group." Pat Brooks

El Mensaje del Presidente

por Pat Brooks

(Traducción por Miguel Wilken y Horacio Gonzalez Moncada)

El agua potable es algo que muchos de nosotros tomamos como un hecho, sin embargo para otras personas es un lujo fuera de su alcance. **Sistemas de Agua Aqualink** empezó como un grupo de voluntarios, todos aficionados de la Baja California y con un gran cariño por la península, personas que buscan la manera de utilizar sus habilidades para apoyar a los pueblitos o colonias en la instalación y manejo de sus sistemas de agua. Compartimos nuestros conocimientos y experiencia para mejorar las condiciones de agua potable en pequeñas comunidades de Baja California. Esto es el valor central de nuestro grupo de voluntarios. Hoy en el siglo XXI, todavía hay personas en Baja California que tienen que llenar cubetas o tambos con agua del arroyo para el abastecimiento de su agua potable, o esperar a que les llegue el agua a través de un sistema de tubería gastada y parchada. Algunas comunidades se encuentran tan lejos de la red eléctrica que hemos instalado paneles solares. Como voluntarios, cooperamos con nuestras ideas, nuestro tiempo y esfuerzo, además de recabar fondos para apoyar a los proyectos. Otro aspecto estrechamente relacionado con el agua potable es el manejo de aguas residuales; también colaboramos en proyectos de esta índole. Para identificar proyectos potenciales, nuestro grupo colabora con el Instituto de Culturas Nativas, A.C. (CUNA) y con la oficina en Ensenada de la Secretaría de Desarrollo Social del Gobierno del Estado de Baja California.

Para evaluar la factibilidad de un proyecto, la comunidad debe reunir los siguientes requisitos mínimos:

- Contar con las escrituras de sus tierras
- Pedir formalmente la participación de Aqualink
- Contar con un consenso comunitario sobre los objetivos y metas del proyecto
- Participar en la planeación, financiamiento y construcción
- Operar y mantener el sistema con un mínimo de apoyo de Aqualink.



Al reunir estos requisitos, se puede dar inicio al proyecto. Muchos de nosotros realizamos proyectos semejantes en el sector privado, pero sin el reto adicional de tener que recabar los fondos. Gestionamos el apoyo financiero con otros grupos de servicio como el Kiwanis, empresas de ingeniería como Bechtel National, con particulares y con la comunidad.

El trabajo voluntario no siempre es fácil, requiere de mucho compromiso, sin embargo la experiencia nos enseña que nos puede dejar mucha satisfacción. Actualmente estamos trabajando en un proyecto en la comunidad Kumiai de San Antonio Necua, en el Valle de Guadalupe al noreste de Ensenada. Incluye la perforación de un pozo, almacenamiento de agua y mejoras a la red de distribución del agua. El proyecto se encuentra en su fase inicial; si le gustaría colaborar, por favor comuníquese con nosotros.



Flores Magon

Mexican Town Finally Gets its Own Water

by Kaare Kjos

A fuse had failed. After three years of dreams, work and delays, it seemed as if the group of Mexican villagers and American volunteers would have to wait again. The frustration was painted on their faces.

But the Americans did some rewiring. The power was switched on. The newly installed pump whirred. The newly assembled pipe belched air. And the well started to spit out a steady stream of water.

"Si," a villager whispered reverently. "Water, pure water. Here."

(San Diego Union, Sunday, December 16, 1984)

And so it began. Flores Magon, a dusty village of some 3,000 people then, 12 miles southwest of the San Ysidro border crossing reached by a bumpy dirt road skirting the ever-smoldering city dump. We cut our teeth here: Fletcher Hills Kiwanis Club-dead Christmas tree-hot town meetings -cold cervezas - redesigns-inaugural fiesta-speeches-3-year hiatus-village politics- frustration-elation-mistakes and lessons...

The road is paved now. The population has doubled. There are trees and gardens. There is a municipal water system in place, although the old system still functions today as a supplier for villages outside the urban fringe. The American volunteers have become Aqualink and our work continues, elsewhere, farther away.



Photos

Top left: Flores Magon residents and Aqualink volunteers celebrate
Above: Lowell Lindsay and Kaare Kjos

"the day she came in..."

Left: Hydrologist John Peterson instructs volunteers

ONCE UPON A FIELD TRIP

by Lowell Lindsay



It was a day to live for. All the elements were there: perfect weather, an azure sky, the Baja outback, and a group of friends embarked on a common endeavor—surveying a Kumiai

Indian village for an upgraded water system and new well. We were bound for San Antonio Necua, which lies some forty miles south of the border, nestled up against the foothills of the Sierra Juarez on the east side of Guadalupe Valley, off Highway 3 from Tecate to Ensenada.

Our group was bi-national as usual: volunteers from Aqualink in San Diego, members from the Native Culture Institute (CUNA) in Ensenada, and villagers from Necua. But wait- does “bi-national” say it all? Hardly. The moment that a smiling Chief Agustin approached and said “Howka” was a moment that seemed to say welcome to a different time and a different place. Welcome to a place of the Kumiai (*Kumeyaay en el otro lado* “on the other side” to the north). Welcome to the home of people who have lived here for hundreds even thousands of years before an international border snaked through the land of the Kumiai. We felt welcome indeed in this beautiful and pastoral village of our native friends.

We were well grounded in water issues confronting the village, thanks to the years-long efforts of several Aqualinkers. The group came together at the turnoff to L.A. Cetto winery and proceeded through the vineyards where we observed the curious phenomenon of a rosebush growing at the head of each row of grapes. I later learned from one who knows of these things that this serves much the same purpose of the fabled canary in the mine. Should the vines become stressed for whatever reason, the fragile roses would be the first evidence of such stress.

After crossing the broad, dry bed of the Guadalupe River, we entered the village and gathered under live oaks at the school. This was the first hint that Cañon de los Encinos (Canyon of the Oaks), where we’d spend most of the day, was aptly named.

Agustin conducted us through the existing and proposed waterworks area, enabling accurate Global Positioning System (GPS) fixes to be taken of the storage tanks, pipe routes, and proposed well site.

The survey completed, the group consolidated into three vehicles to make the rugged four-mile climb to the *ojo de agua* (water spring) which presently provides all potable water to the village via a leaky and aging PVC pipeline. This system was indeed our reason for being here: the growth of the village and tightening grip of the current years-long drought has stressed

this water supply to the danger point. But even given the gravity of the mission, our thoughts and conversation quickly succumbed to the natural beauty and charm of this pleasant little valley, high on the northern flank of majestic Cerro de los Pinos (Mountain of the Pines). This site of Necua Viejo, with its crumbling adobes, artifacts, and now-fallow fields, murmured volumes about those who had lived here. The archeologists and anthropologists in our group chose to spend the next several hours onsite, guided by Agustin who had been born in Old Necua and who eloquently shared the spirit



L-R: Ricardo Eaton, Agustin Dominguez, Kathy Stevens & Mike Wilken at Pila #1, Necua

and knowledge of earlier times.

The rest of the group, beckoned by the prospect of geologic and botanic treasures high on the mountain, climbed south over rough 4WD trail to reach lonely sentinels of coulter pines, namesake for Cerro de los Pinos. Iron-colored, limey pisolite pebbles offered evidence that this relict forest, the western outpost of coulters on the borderland of Alta and Baja California, was once far more extensive. This may have been as recently as the end of Pleistocene time about ten thousand years ago when the climate was much cooler and wetter than today as the last ice age receded. As the 4WD track became impassable, a hike to the summit of the route revealed a sweeping view across highlands and lowlands, far into the fog-shrouded Pacific and devoid of any human sign. Timeless it seemed but as creatures driven by time, even this best of days was coming to an end.

After the group reunited, we descended from the mountain, bade farewell to our local friends and returned north to *el otro lado*, for hopefully only a short while.



TREASURER'S UPDATE

by John Peterson

Aqualink had total assets of \$2,017 for the fiscal year ending June 30, 2002. For the year total contributions were \$1,080 with expenditures of \$193. Expenditures were \$28 for the cost of the last newsletter and \$154 for supplies required at the Santa Catarina job site. Thus total operational expenses for the organization were only \$28, the cost of the newsletter.

Currently the bank balance is \$2,041.30 reflecting several small donations to the organization. Since June 2002, no operational expenses have occurred.

For any additional information please contact John Peterson Treasurer at johneepeterson@hotmail.com.

PRELIMINARY NECUA PROJECT BUDGET			
Description	Units Required	Cost per Unit	Total Cost
Submersible pump & motor	1	\$1,900	\$1,900
Pump panel control box	1	\$700	\$700
Telemetry controls for water level			\$900
3" sched 80 PVC pipe	2200	\$1.10	\$2,420
4" sched 80 PVC pipe	1000	\$1.50	\$1,500
Pipe fittings & adapters			\$3,000
Electrical supplies and line			\$7,000
Well drilling per foot	250	\$95	\$23,750
Electrical engineering			\$7,000
Hydraulic engineering			\$6,000
Plans and permits			\$11,000
Misc expenses	5%		\$3,259
Contingency allowance	10%		\$6,843
Total Required			\$75,271
Cash donations to date (sample)	5%		\$3,764
In-kind donations to date (sample)	8%		\$6,022
Needed to complete project			\$65,485

Here's a telling passage from the book "Gila: Life and Death of an American River": An anthropologist asked a Hopi Indian why so many of his people's songs were about rain. The Hopi replied, "Because water is so scarce." Then he questions the anthropologist: "Is that why so many of your songs are about love?"



Girls of Flores Magon

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Aqualink is a 501 (C) (3)
Non Profit Corporation

Our mission is to provide community development assistance to villages in Baja California, Mexico, with primary emphasis on potable water systems.

For more information, please contact:
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Necua
Agua ♦ Water ♦ 'Ehaa