

USING PROFESSIONAL NETWORKS TO DEVELOP WATER QUALITY INFRASTRUCTURE IN CENTRAL AND EASTERN EUROPE

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Members of the Water Environment Federation (WEF) have long recognized the value that WEF brings to the U.S. wastewater sector. As a professional association, WEF has helped develop the professionalism and technology of the water quality field through journals, conferences, research, and professional recognition. WEF brought this model of professionals improving their field to selected countries in Central and Eastern Europe (CEE) through a cooperative agreement with the U.S. Environmental Protection Agency (EPA). The result of this effort is an understanding of how professional associations can help develop the infrastructure and capabilities of the wastewater sector in countries transitioning from centrally planned to market driven economies.

WEF is a not-for-profit educational organization with over 40,000 members from every aspect of the water quality industry. Members include utility managers, operators, scientists, manufactures, engineers, and academics. WEF is a federation of 73 Member Associations (MA) from 31 countries around the world. The association's activities benefit members professionally and implement WEF's mission of promoting and advancing the water quality industry and enhancing the global water environment. These activities include developing CD-ROM training courses, publishing peer reviewed research journals and manuals, holding workshops and conferences, providing technical information to the legislative process, and public education and outreach programs.

WEF members are the engine of the Federation. Members guide WEF's strategy, write the publications, teach the workshops, develop WEF policy positions, and testify before Congress. This model of professionals volunteering to advance the industry was the basis for the WEF/EPA Central and Eastern European Technical Exchange Program (Program).

The program started in 1992 via a cooperative agreement between WEF and EPA with funding from the U.S. Agency for International Development. The program was

active in Bulgaria, Hungary, Poland, and Slovakia. The program initially focused on WEF members providing volunteer technical assistance to their CEE peers. WEF and EPA soon realized the added value gained by promoting professional associations in the CEE countries. Through these associations, the program would reach a larger audience and the associations could serve as repositories for technical information. Thus, an association building component was added to the program. Towards the end of the program, additional emphasis was placed on developing sustainable programs and relationships that would continue after the program ended.

Two projects in particular illustrate how WEF volunteers carried out the technical exchange program. In Poland, WEF members provided technical assistance to a state government and a watershed association, The Union of Upper Raba River Communities and Cracow, to protect a drinking water reservoir. In Bulgaria, WEF worked with a professional association, the Bulgarian National Association on Water Quality (BNAWQ), to provide technical information, improve the viability of the association, and promote a sustainable relationship with a WEF Member Association. These two examples show the unique value that professional associations bring to an international program and the types of activities best suited for volunteer assistance.

BUILDING ASSOCIATIONS: SUSTAINABLE RESULTS IN BULGARIA

The BNAWQ held their fourth annual conference in February 1999. With the WEF/EPA Technical Exchange Program ending, no travel funds were available to send WEF members to the conference. Members had attended all the previous conferences to present papers, conduct workshops, and meet with BNAWQ members. This was considered important, not only because of the opportunity for technical exchange, but because the presence of international participants made the conference more valuable, and helped build the reputation and standing of

the BNAWQ. But even with no technical exchange program funds, not one, but four WEF members participated in the conference.

WEF's support of the conference illustrates the success of the effort to build a sustainable program through relationships between organizations. Both WEF and the WEF Member Association (MA), and the Chesapeake Water Environment Association (Chesapeake) are continuing to work with the BNAWQ. The success in building lasting relationships comes from the involvement of the right people in the process, nurturing the relationship, and ultimately giving "ownership" of the project to WEF members. The project in Bulgaria has some unique characteristics but the model should work with other organizations in other countries.

WEF's support comes in part because the BNAWQ became a WEF Corresponding Association. Corresponding Associations are affiliated with WEF and exchange publications but unlike Member Associations have no stipulated requirements for individual WEF memberships. At this time, becoming an MA does not make sense for the BNAWQ. Bulgaria has a difficult economic situation and few Bulgarian professionals can afford WEF's membership fees. However, affiliation with WEF offers several benefits to the BNAWQ. During a 1998 trip, WEF volunteers found that "BNAWQ's relationships with the west, with WEF and other organizations; its ability to attract European and American speakers to its conferences; and its ability to obtain requested technical information contributes immensely to BNAWQ's stature and credibility in Bulgaria."

Because WEF is a Corresponding Association, WEF President Rhonda Harris attended the BNAWQ's 1999 annual conference. Harris' husband, Paul Roach, who is a WEF member and chair of the WEF Professional Development Committee, also attended the conference. This trip was important for two reasons, to show WEF support for the BNAWQ and to continue building support for the BNAWQ within WEF. WEF is a large organization with many competing interests, and it is important to raise the visibility of the BNAWQ to ensure future support.

The other two WEF attendees at the annual conference came from the Chesapeake Association. The relationship between the BNAWQ and Chesapeake is perhaps the biggest success of the program's sustainability efforts. Cy Jones and Marilyn O'Neal attended the conference using a quick response grant from Ecolinks. This U.S. AID-funded program assists organizations and businesses in Central and Eastern Europe, and the Newly Independent States through partnerships between businesses, municipalities, and associations. The purpose of attending

the conference was to further the relationship between the two organizations and to plan a project for a larger Ecolinks grant.

Following the conference, the BNAWQ and Chesapeake applied for an Ecolinks Challenge grant for a project to help a municipality develop a pretreatment program. This program will serve as a model for other communities in Bulgaria. Grant awards will be made in June 1999. Chesapeake also voted to provide the BNAWQ with a \$500 grant for operating expenses, and is planning to collect and donate scientific equipment and technical publications to the association.

The relationship between the organizations is on solid footing and certainly is outlasting the Technical Exchange Program. Several factors contributed to this success: the interest and persistence of Chesapeake members, strong leadership at the BNAWQ, Technical Exchange Program funding for travel, a WEF staff person with the time to facilitate the relationship, the BNAWQ's clear vision of the organization's purpose and time for the relationship to develop. All of these elements were necessary for the relationship to start and develop.

Building a rapport between the two organizations did not occur overnight. Chesapeake member Marilyn O'Neal first visited Bulgaria in 1994, on a "fact finding" trip to identify organizations for WEF to work with under the Technical Exchange Program. The newly formed BNAWQ was invited to participate in an association building meeting in Tulsa, Oklahoma sponsored by the Program. However, the formal "association building" components of the Program were not as helpful in developing relationships with associations as later technically focused activities and attendance at conferences. Marilyn O'Neal returned to Bulgaria in 1995 to attend the BNAWQ annual conference. In 1997, BNAWQ leaders attended the WEF Volunteer Leaders workshop in Alexandria and met with Chesapeake members. In 1998, Chesapeake members Cy Jones and Larry Jaworski participated in the BNAWQ's annual conference. During these visits, Chesapeake members were impressed with the enthusiasm of BNAWQ members and the goals of the organization. These firsthand impressions gave the BNAWQ the full support of the visiting Chesapeake members.

The support of these Chesapeake members could be translated into support from the entire association because they were active leaders in the Chesapeake Association. Both Cy Jones and Marilyn O'Neal are past presidents of the Chesapeake Water Environment Association. Cy Jones and Larry Jaworski are on WEF's Board of Directors, and Jaworski also chairs WEF's Government Affairs Committee. The selection of association leaders

to participate in the program was key to gaining the support of the Chesapeake Association.

Because MAs are membership organizations with many competing projects, gaining the broad support of the members is imperative for new programs. Members of a pollution prevention sub-committee with the California Water Environment Association (CWEA) were also interested in partnering with the BNAWQ. Initially the members provided technical assistance as part of the strategy to build the BNAWQ through technical programs. CWEA members conducted several pollution prevention assessments and held workshops on pollution prevention at the Sofia Municipal Wastewater Treatment Plant, Kremikovtzi Corporation (an iron and steel manufacturing plant), and at the University of Architecture, Civil Engineering, and Geodesy. These technical programs were very well received. However, CWEA did not have broad support for a program with one association so the committee decided to act as a source of technical information on pollution prevention rather than participating in a partnering arrangement.

The BNAWQ is a well organized, focused association with a strong leader. The significance of this to the success of the program cannot be overestimated. In addition, the BNAWQ is supported by an active group of members. WEF's experience is that it is difficult to have a successful international exchange program without in-country support. The BNAWQ was also able to articulate the type of support and programs that would most benefit the organization.

Equally important was the perception that the BNAWQ has an important role to play in Bulgaria. The country has serious water problems including insufficient water resources, a deteriorated infrastructure, and significant water pollution. The country's ability to address these problems is hampered by the overlapping authority of conflicting ministries, lack of a long-term plan, and inadequate laws. WEF members Jones and Jaworski found that the BNAWQ:

“plays a critical political and technical role in Bulgaria by providing the leadership and vision that the government is not yet able to provide the BNAWQ is providing several vital functions. Of the organizations we were exposed to, the BNAWQ is the only one articulating a vision for the development and implementation of rational, pragmatic, and effective water resources programs and seemingly the only organization possessing the energy needed to move those visions toward implementation. In addition, Bulgaria's water quality technical expertise seems to lie with the members of BNAWQ.

BNAWQ is also the only organization in Bulgaria facilitating effective communications among water quality professionals. The BNAWQ annual meetings and technical conferences, including the Black Sea conference, are the only such technical conferences in the country.”

Thus the success of the Technical Exchange Program in Bulgaria and the sustainability of the relationship between Chesapeake and the BNAWQ comes from having the right organizations and the right people. The approach used in Bulgaria to create a sustainable program can be used to help associations in other countries. However, the same elements are needed for success: an association with a purpose, strong leadership, and interest and dedication in the partnering association.

TECHNICAL ASSISTANCE: WATER QUALITY IN POLAND

In Poland, the program provided technical assistance and did not actively pursue association building. The effort evolved this way for several reasons. One is that there was a well-defined environmental need and specific tasks that could be addressed by volunteers. In addition, previous WEF efforts to promote associations in Poland had not been successful. On several occasions, WEF had been approached by WEF members who were interested in starting a WEF MA in Poland. These projects never transpired and existing Polish associations had not shown an interest in working with WEF.

The program focused on water quality issues in Cracow and the nearby Raba River watershed. The primary goal was to help protect the Dobczyce Reservoir, which supplies 60 per cent of the drinking water for Cracow. The Reservoir's water quality is threatened by pollution from raw sewage; stormwater runoff from roads, agriculture, logging, landfills and dumps, and fertilizer and pesticide storage areas; and particulates from air pollution. To protect the reservoir, the gminas (communities) in the watershed and Cracow created the Union of Upper Raba River Communities and Cracow (Union). Members of the Union are the mayors of the communities.

The Union is currently implementing a watershed management plan and so far has constructed 80 km of sewer systems, a wastewater treatment plant for the City of Rabka, a sewage pumping station, and a number of smaller domestic wastewater treatment plants. In addition, a landfill that was contributing to the pollution was closed. Currently, the Union's biggest challenge is getting the financing from the State budget that was previously promised.

Three types of assistance were provided by the program: workshops, technical advice, and exchange trips. The feedback from participants was generally positive and additional programs were often requested. The program was a success for some of the same reasons that it worked in Bulgaria, strong leadership and a well-defined purpose. Jerzy Wertz, head of the Cracow Voivodship Environmental Protection Department was very clear about the types of assistance he wanted from the Technical Exchange Program. The director of the Union was also able to articulate the type of assistance that would help.

This may sound like a minor point, but with a limited budget, and no personnel or office in the country, the Technical Exchange Program depended on in-country partners to identify projects. The experience in Cracow contrasts with the experience in Hungary. WEF volunteers worked with a utility and a professional association for over a year but could never define a focused program. So although several successful workshops and study tours were arranged, a cohesive program did not emerge.

In Poland, seminars were frequently requested. Seminar topics included Biological Nutrient Removal (BNR), biosolids management, highway storm water impacts and control, and Alternative Dispute Resolution (ADR). Seminars are an area where the experience of WEF volunteers is unique. WEF volunteers are often higher level professionals, such as utility directors, who cannot be hired as consultants. The opportunity to discuss similar problems and solutions with professionals was at least as valuable, if not more, than the technical content of the workshops. For example, the BNR workshop generated a discussion of how the phosphate ban had worked in the U.S., how it was implemented, and the impact on wastewater treatment plants. During the biosolids seminar, the WEF volunteer, who was a utility manager, recounted his experience with biosolids at his plant. He recalled how at one time sludge was landfilled, then banned from landfills and stockpiled at the plant, and the problem finally resolved when beneficial re-use was promoted.

Training in ADR was another successful component and illustrates the importance of finding the right volunteers. WEF volunteers are selected not only for their experience and technical ability but also for their interest in remaining involved with the program. In 1995, WEF asked John McGlennon to make a presentation on ADR to a group of mayors in Cracow. Following the meeting, Jerzy Wertz requested training in ADR, and McGlennon was asked to conduct a basic course. From that point on, McGlennon led the project. He identified a Polish mediation firm to team with to develop the training material and conduct the course. After the first class, Wertz requested another basic class plus a more advanced one, and offered to pay part of

the cost of the additional training. McGlennon also involved a U.S. mediation firm that had just received funding to assist with environmental mediation in Poland. The firm, Resolve, funded several mediations of environmental issues in the Raba River watershed.

WEF members also provided technical expertise. The Union requested that WEF review a watershed management plan that had been prepared by an engineering firm in Poland. This type of review was a perfect assignment for WEF volunteers. The WEF Nonpoint Source Committee spearheaded the effort, and the Chair identified a team of eight experts to review the watershed report. After producing a draft report, two members of the team visited Poland to tour the watershed and present the initial finding. Based on this trip, the review report was then finalized. According to the director of the Union, this review was the most important assistance provided under the program. The report was valuable because it was written by unbiased experts and the Union used the report to support requests for financial assistance for implementing the watershed management plan.

One of the team members who participated in the trip to Poland, Dr. Jerzy Ganczarzyk, is a Polish engineering professor who lives in Canada. WEF members originally from CEE countries were some of the most useful volunteers because they knew the language and had an ongoing interest in the country. For example, Professor Ganczarzyk took two days out of a vacation in Poland to visit a wastewater treatment plant in the Raba River watershed and provide advice on proposed modifications to the plant. On several other occasions, WEF members volunteered their assistance while on vacation in Europe. This is an excellent example of the dedication provided to this type of project.

Exchange trips were the third type of assistance provided by the Program. In July 1997 the director of the Union and two of the mayors participated in a study tour in Boston and Pennsylvania. The group met with a watershed association, regulatory officials, and toured wastewater treatment plants and a waste to energy incinerator. According to Peace Corps volunteer, Andrew Bielanski who worked for the Union, this trip was "highly valued by the individuals who took part in it The three did gain insight on how things were done in the U.S. and established some contacts with other WEF members." Bielanski thought that similar study tours for more of the mayors, especially ones who tended to be skeptical of the Union, would have been very beneficial.

As part of the attempt to create sustainable programs, an effort was made to partner the Union with a watershed association. This type of organization made more sense

than a WEF MA since the Union is not a professional association. The Charles River Watershed Association (CRWA) was interested in partnering and helped plan the Boston trip. After that trip, a CRWA staff person was hosted by the Union in Poland. At this time, additional activities between the two groups have not been planned and there is no funding for travel. For this partnership to work, a funding source needs to be identified.

SUMMARY

Professionals helping improve their industry are a valuable way to provide assistance in developing countries and transitional economies. The experience in Bulgaria and Poland show the areas where volunteers can best be used and the flexibility of the program to respond to different needs. The experience in these countries also identified some of the key elements for success. Peace Corps volunteer Bielanski observed that the exchange of ideas and dispelling preconceptions of how things are done in the U.S. was a valuable part of the program.

- The program provided valuable lessons on how to promote associations, help build new organizations, the role of associations within a local context, and how to plan successful technical assistance and use volunteers. Lessons learned from the program include:
- Certain activities are best suited for volunteers (for example, seminars or technical assistance on a well-defined, limited topic).
- Identification of the elements needed for a successful start-up member association - strong interest within the

country, a champion or champions within the country, and a well-defined mission or need for the new association to fill.

- That patience and time are needed to build relationships with organizations overseas and that successful partnerships include many of the same elements required for starting an association (such as strong interest, champions, and well-defined programs).
- Continuity created by using some of the same volunteers on trips helps promote partnerships, builds relationships, and allows trust to develop.
- Successful programs can attract additional funding from a variety of sources.
- Professional associations have a valuable role to play in developing the infrastructure that countries need to meet their environmental problems. This includes training, professional development, being a technical resource, and providing input for legislation.

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