STRENGTH IN NUMBERS
How to Form a Rural Utility Cooperative

2nd Edition:
Includes Lessons Learned
### Table of Contents

Executive Summary ....................................................... 1
1. Why a cooperative? .................................................. 1
2. Introduction .......................................................... 3
3. Getting started: RUC Q&A .......................................... 5
4. The 6 phases of developing a RUC .......................... 12
5. Phase I: Identifying an opportunity .......................... 15
6. Phase II: Building consensus on the potential for a RUC 17
7. Phase III: Involving other support groups ................. 19
8. Phase IV: Developing trust among potential members 23
9. Phase V: Securing member commitment .................. 32
10. Phase VI: Achieving a successful start .................... 38
11. Summary ........................................................... 42

Appendix A: Additional sources of information ............. 43
Appendix B: Resources ................................................. 45
Appendix C: Sample budgets ....................................... 48
Appendix D: Letters of support ..................................... 50
Appendix E: CRAS report ............................................. 55
September 2003

To all Alaska Natives:

On behalf of the Alaska Native Tribal Health Consortium and its Division of Environmental Health and Engineering, we are pleased to offer you a guidebook for developing Rural Utility Cooperatives. This guidebook grew out of Sustainable Utilities in Rural Alaska, the November 2001 Steering Committee report, which recognized that partnerships can lower utility costs and create the capacity to sustain utility operation and maintenance.

Creating an economy of scale equates to strength in numbers. The small population base in most rural communities means that the cost per household to operate and maintain sanitation facilities is much higher than in urban areas. A rural community can address this need by joining with other communities facing similar challenges. Alaska Natives have survived for thousands of years by relying on each other for health and well-being. Cooperatives call upon cultural strengths in the effort to reach economic stability.

Our primary focus is sustainability. The Division of Environmental Health and Engineering works collaboratively with communities and tribal health organizations to plan, design and build sanitation facilities. We work together in renovating and expanding facilities as communities grow. We ensure operator training and provide operations and maintenance plans. Yet, the needs continue for rural communities attempting to achieve long-term operation after the physical utility infrastructure is in place.

Achieving sustainable utilities is a goal shared by many communities and the federal, state, tribal and private organizations that serve rural Alaska. The Alaska Native Tribal Health Consortium has taken the initiative in developing the cooperative concept because we believe that cooperatives offer a key to meeting the challenges of rural utility operation.

We hope this guidebook will be a useful tool as you explore the possibility of forming a cooperative to meet your community’s utility needs.

Sincerely,

Don Kashevaroff
Chairman and President

Paul Sherry
Chief Executive Officer

Steve Weaver
Senior Director, DEHE
CHAPTER 1: WHY A COOPERATIVE? Advantages of a Rural Utility Cooperative can include lower per-unit cost, an improvement in public health, utility sustainability, stable local employment, increased ability to earn infrastructure grants, relieving village administrators from daily utility management, gaining experience and service of a RUC manager, controlling expenses, and creating steady income.

CHAPTER 2: INTRODUCTION A cooperative is a jointly owned means of production or distribution of goods or services that is operated by the consumers of the goods or services. Some principles of such an organization include voluntary membership, democratic control by members, economic participation by members, autonomy and independence, education/training/information, cooperation among members, and concern for community.

CHAPTER 3: RUC Q&A Forming a RUC can be a complex process, but there are more pros than cons to doing so. Communities that want to improve or streamline their operations should consider a RUC which can result in benefits besides monetary ones. There are many free resources available to those who are forming a cooperative.


CHAPTER 5: PHASE 1—IDENTIFYING AN OPPORTUNITY Identifying an opportunity varies according to each situation, but common to all situations are the need to 1. Define critical questions, 2. Explore relevant problems or economic needs, 3. Look at successes in other communities, 4. Hold initial meetings to review the scope and nature of a cooperative solution, 5. Discuss and agree on
the scope and nature of problem/opportunity, 6. Research economic aspects of problem.


CHAPTER 7: PHASE III—INVOLVING OTHER SUPPORT GROUPS 1. Secure necessary financing, 2. Formalize relations with customers and suppliers.

CHAPTER 8: PHASE IV—DEVELOPING TRUST AMONG POTENTIAL MEMBERS 1. Identify an advisor to champion the project, 2. Establish RUC Formation Group, 3. Agree on a calendar and tasks, 4. Assign tasks, 5. Retain a manager, 6. Conduct a feasibility study, 7. Agree on feasibility.


CHAPTER 10: PHASE VI—ACHIEVING A SUCCESSFUL START 1. Elect RUC Advisory Council, 2. Establish billing/collections system, 3. Establish physical address, 4. Hire operators, 5. Set up benefits plan (or use an existing organization overseeing the RUC), 6. Address issues from Regulatory Commission of Alaska and other regulating agencies.
You have a good community with good people, and you work hard to provide the best for those around you. You have the opportunity to be a great community, to leave a legacy of health and sustainability that will carry your children into the future.

Because of the remoteness of your village, your experience has been unique. As you have developed and maintained your utility, you have faced many challenges and overcome many obstacles. These challenges have made you stronger and wiser, but how do you prepare for the unexpected? This is where a Rural Utility Cooperative (RUC) can help.

This manual is designed guide you through the process of forming a RUC. By combining your experience with the experiences of surrounding communities, you increase your knowledge, power and ability to build a stronger foundation for the future. Some advantages of a RUC are:

1. **Lower per unit cost.** Fuel and electricity are two of the largest utility costs in rural Alaska. Combining purchases among Rural Utility Cooperative communities creates economies of scale—purchasing power! It lowers the cost of fuel, parts and freight, which lowers the per-unit costs of water and sewer service billed to homeowners.

2. **Improves public health** by reducing the likelihood your village will be on the Significant Non-Compliance (SNC) list, which identifies communities that don’t meet the water quality and testing regulations of the U.S. Environmental Protection Agency under the Safe Drinking Water Act. The State of Alaska maintains the SNC list and enforces EPA regulations. Proper testing and higher quality water help ensure public health.

3. **Provides for sustainability** by increasing the likelihood that preventive maintenance and daily tasks are performed. This extends the longevity of utility equip-
4. **Provides stable local employment** by furnishing utility operators with benefits such as competitive wages, training and advancement opportunities, vacation pay, health insurance and a retirement plan. These benefits attract and retain quality local employees as operators, and reduce turnover.

5. **Improves ability to earn infrastructure grants** by ensuring your village meets the “essential and sustainable indicators” of the Rural Utility Business Advisor (RUBA) program. This State of Alaska program helps rural communities with the administrative tasks of operating utilities, such as preparing budgets, collecting user fees and tracking expenses. The indicators identify the technical, financial and managerial capacity of a village to operate and maintain its utilities, and are important requirements of state and federal grants.

6. **Relieves village administrators from daily utility management.** A RUC manager has a depth of experience in operating and maintaining utilities. After joining or forming a RUC, village administrators have time to focus on other responsibilities.

7. **Gains the experience and service of a RUC manager.** Each RUC community gains the services of a full-time, experienced cooperative manager who is trained in operating, maintaining and managing utilities.

8. **Controls expenses.** A RUC village can potentially reduce operating expenses by planning maintenance and anticipating problems before they arise (or become large problems).

9. **Creates steady income.** A consistent billing and collection system increases the collection of user fees.

Intrigued? Read on to see if a Rural Utility Cooperative may be right for your community and region!
To begin with, we must define a cooperative, which is a jointly owned means of producing or distributing goods or services that is operated by the consumers of those goods or services. In the case of a Rural Utility Cooperative, the consumers would be the people and/or organizations in a particular village or group of communities that use the services.

The goal of a RUC is higher quality and lower costs for the service(s) it provides. The principle at work here is known as “economy of scale.” For example, if Alaska Village Electric Cooperative (AVEC) buys fuel, it buys so much that the seller can afford to offer the cooperative a price break on each gallon and still make a sizable profit. In other words, AVEC owns so many power plants in Alaska it has behind it strength in numbers. Also, higher quality of services is possible because the RUC is operated locally and therefore held more accountable to, and has closer communication with, its customers.

This manual describes:

- How a RUC works.
- How to develop a new RUC.
- Different ways a RUC can be organized.
- Opportunities for utility services that will protect public health and improve the quality of life of the customers.
- The experience of an organization that developed and runs a successful RUC.

These principles will illustrate how a cooperative can be built among rural Alaska village enterprises. Some services that might be considered for a RUC are bulk fuel, water and sewer, cable television, electric, solid waste and other locally owned utilities. Please see Appendix E for data from the Alaska Regulatory Commission’s Cooperatives in Rural Alaska Subcommittee.

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**What is a cooperative?**

A good example of a local cooperative is Alaska Village Electric Cooperative (AVEC), which is owned by its consumers.

**7 guiding principles of a cooperative**

1. **Voluntary membership:** Open to anyone who can use its services.
2. **Democratic member control:** Elected representatives are accountable to the membership. In primary cooperatives, each member has equal voting rights (one member, one vote).
3. **Members’ economic participation:** Members contribute equitably to and democratically control the capital of their cooperative.
4. **Autonomy and independence:** Cooperatives are autonomous, self-help organizations controlled by their members.
5. **Education, training and information:** Cooperatives provide education and training for their members, elected representatives, managers, and employees so they can contribute effectively to the organization.
6. **Cooperation among cooperatives:** Cooperatives work together through local, national, regional, and international structures.
7. **Concern for community:** Cooperatives work for the sustainable development of their communities through policies accepted by their members.
LESSONS LEARNED

The RUC that was created by Yukon-Kuskokwim Health Corporation (YKHC) and is described in this manual is not a cooperative in the purest sense of the word, though it operates on the principles upon which a cooperative is based. Rather, it is a hybrid. Instead of being overseen by an independent board of directors, the YKHC board of directors has assumed that role. Also, the YKHC RUC does not pay out dividends to its members when it earns more than it spends. The communities involved in this RUC still own their respective utilities.
The following are questions you should consider before you decide to form a Rural Utility Cooperative...

Q: Who can form a cooperative?
A: • City government
• Tribal government/organization
• Utility company
• Borough
• School district
• Multi-community utility organization

The "who" depends on the capacity of the organization forming the RUC, its resources, and its desire to help other entities within its area or region. For example, a community might realize a reduction in costs for services if all utilities are managed by a single organization, or cooperative—a joint utilities group. Alaska Village Electric Cooperative has benefited its members by reducing electric rates, with the added bonus of improving the quality of life of its customers through more consistent electrical service.

Q: Is a RUC right for you?
A: The process of forming a Rural Utility Cooperative is difficult. Perhaps the hardest part is identifying the people, communities or organizations that will be part of the formation process. A critical number of them must agree to participate before the RUC can form.

The initial step is complex because it involves working with a diverse set of people and organizations to develop agreements on the vision, mission and feasibility of the proposed cooperative. Some of the participants may be local enterprises, leaders, residents, utility suppliers, or customers.

Executive Summary

• Nearly any group of villages can form a RUC.
• Forming a RUC is a complex process that requires commitment from a diverse set of members.
• There are many more pros than cons to forming a utility cooperative.
• Communities that want to improve and streamline operations may consider forming or joining a RUC.
• Economic benefits are usually prime motivators behind the formation of RUCs, though there are other benefits.
• A RUC usually takes time and effort to form.
• There is a lot of free help and resources available to those who are forming a cooperative.
• In starting a RUC, professional advisors may need to be hired to help in the areas of organization, legal, finance, and business feasibility. This may initially be a financial burden to the community, though costs may be recovered through improved utility operating practices.
• In selecting consultants, look at their history of involvement with similar enterprises, call references, and make sure they can work with people of diverse backgrounds and knowledge levels.
In addition to the challenges any new operation must face, a new RUC must be built on a high level of trust and confidence in the participants during the formation stage. Without trust, it is difficult to gain the member commitment that will be required to fund and support the cooperative.

Q: Who should form a RUC?
A: Communities that ...

... want local control but less day-to-day responsibility for utilities.
... want to provide quality service at a lower unit cost (economy of scale).
... struggle to, or cannot, stay in compliance with federal/state regulations.
... want to increase their chances of getting infrastructure grants.
... need assistance billing and collecting utility user fees.
... want to increase level of service to their customers.
... seek increased accountability for public health protection and improvement.
... cannot meet the list of essential indicators of the state’s Rural Utility Business Advisor program beginning on Page 24 of this manual.
... try as they might, cannot balance the utility’s budget.
... are looking for ways to serve future generations.

Q: Who controls what in a RUC?
A: In this model, a RUC is established with each member community generally owning its infrastructure. An Advisory Council is elected to represent each village or organization (for example, a school that owns and operates its own water treatment plant and boilers) that is a member of the RUC. The group works with the advisory groups of other RUC members to create the governing rules of the cooperative. RUCs can allow for local control of hiring, firing and grant applications. The RUC operator does the day-to-day tasks such as preventive maintenance, submitting work orders, collecting user fees, and paying the bills. The manager of the cooperative makes sure that utility systems are in compliance with regulations, the operator is properly trained, and parts are ordered when needed.

Q: What are the pros and cons of forming a cooperative?
A: Pros ...

- Splitting large purchases among members creates an economy of scale.
- One manager provides a consistent level of service to all members.
- Village mayors, administrators and tribes can be relieved of the burden of day-to-day management of utilities, giving them more time to attend to other duties.
• It is easier to find licensed professionals to meet state requirements for system operations.
• Bill collections and employee terminations are handled by professionals who may live outside the community.
• Billing services can be tailored to fit community needs.
• Utilities become more sustainable.
• A formal utility business plan is completed.
• Quality of service increases.
• Public health benefits increase.
• Points are maximized when applying for state Village Safe Water grants and Indian Health Service/Alaska Native Tribal Health Consortium sanitation funding.

Cons ...
• Forming a RUC can be very time-consuming in the early stages of development.
• Finding the right funding to start a RUC can be challenging.
• A cooperative is not the right tool to solve business problems.
• Finding a qualified manager takes time.
• Routines change when new management takes over.
• New habits must be formed.
• Bills must be paid on time.
• Services will be disconnected for non-payment.
• Possible higher household rates.

Q: Why start a Rural Utility Cooperative?
A: When considering a RUC, prospective community member-owners are frequently seeking the most economical way to operate their utility systems.

Typically, a village utility assesses the feasibility, risk and potential returns, and agrees that a cooperative holds the potential for adequate returns to offset the risks taken and costs incurred. However, the motivation of rural communities in starting a RUC can involve a more complex cost-benefit equation.

A group of potential members is not just seeking ways to decrease utility operating costs and improve or maintain quality. They are usually responding to an economic problem or an opportunity requiring more resources or capital than they can individually supply. The individual utilities involved are looking for the best opportunity as a group to operate a cooperative enterprise (village utility) that generates revenue
equal to operating costs, thereby creating long-term economic sustainability for each member.

Another reason to start a RUC is that it saves valuable time for city managers and other local government personnel. Because the cooperative has its own staff, city managers don’t have to devote as much (or any) time to overseeing utilities. Communities benefit in two ways: Community leaders can devote more time to other community needs, and the utilities are operated in a consistent manner by dedicated staff.

Other reasons to start a RUC include indirect benefits such as the ability to pay utility employees higher wages, thus attracting and retaining employees. A cooperative can absorb costs much more easily than a stand-alone utility, and a result is being better able to afford the cost of complying with new regulations.

Additionally, a RUC ensures that its communities receive maximum operations and maintenance points when applying for Village Safe Water grants and Indian Health Service/Alaska Native Tribal Health Consortium sanitation grants.

**Q: How long does it take to form a RUC?**

**A:** The process is time-consuming. Forming a RUC involves a number of leaders, advisors and professionals, as well as support from other organizations. The involvement of all these individuals and entities must be coordinated, and a multitude of informational and organizational meetings must be held.

**Q: Who can help support the organization of a RUC?**

**A:** Attempts to organize a voluntary association involving many individuals often require some kind of external support. This typically comes from individuals or organizations that have no direct financial interest in the new RUC but wish to promote the goals of the group.

For example, the Alaska Native Tribal Health Consortium (ANTHC) or a regional health corporation can be enlisted to provide an objective perspective during initial discussions. Other support can include assistance in facilitating meetings, seeking resources or funding, and acting as a catalyst to pursue potential opportunities. Aspects of more intensive advisory support during the process of forming a RUC will be discussed in the next section.
Interest in and support for forming RUCs has increased in Alaska. ANTHC, the Rasmuson Foundation, the Denali Commission, the State of Alaska, and a number of federal agencies, including the Environmental Protection Agency and the U.S. Department of Agriculture, Rural Development, are supporting the Rural Utility Cooperative concept.

Many states or regions have cooperative councils with personnel who are knowledgeable about cooperatives. The Northwest Cooperative Development Center is one good source of information. The University of Alaska and its cooperative extension service may have faculty or staff to advise those considering a RUC. In addition, numerous state offices of the U.S. Department of Agriculture, Rural Development, actively promote the development of cooperatives. For a list of some of these resources, please see Appendix B at the end of this manual.

Sources of help may also include the Alaska Department of Commerce, Community and Economic Development, state cooperative councils or an established cooperative. Other federal agencies, such as the Small Business Administration, and state and regional development agencies that provide general business assistance, may be helpful in developing business plans or conducting market research. Given the unique aspects of forming a cooperative, it is preferable to work with advisors who possess a good working knowledge of such organizations.

Q: What is the role of advisors and consultants?
A: Specialized help is usually necessary throughout the stages of forming a RUC. Leaders need professionals familiar with the process of developing a cooperative to work with them concerning organizational, legal, economic, business feasibility and financial aspects. A few places to find help are:

- Alaska Native Tribal Health Consortium Statewide Utility Association
- The state’s Rural Utility Business Advisor (RUBA) program
- Yukon-Kuskokwim Health Corporation

In addition, organizers should seek financial counsel from an individual or organization familiar with cooperative accounting and finance, such as the state’s RUBA program. Such a person or organization can provide valuable input into the design of the feasibility study, and may have staff who are specialists in cooperative finance and accounting matters.
The RUC will need an accountant to assist in setting up the bookkeeping system and in organizing records.

Finally, a variety of technical advisors, which can be found in the bulleted lists on Pages 9 and 19, may be needed. Another aspect to keep in mind is that new RUCs are affected by government regulations and typically need expert advice on meeting those requirements. Other consultants who do not need to have cooperative expertise but may be useful include engineers, environmental specialists and state regulatory personnel. Typically, the work of the necessary consultants and advisors is incorporated into the relevant sections of the business plan and prospectus for the new cooperative.

Q: How do we select advisors and consultants?
A: Seeking the advice of other groups that have formed similar organizations can be helpful for getting referrals for advisors and gaining an understanding of some of the pitfalls that may be involved in starting a RUC. A few of these advisors could be from Yukon-Kuskokwim Health Corporation, Alaska Native Tribal Health Consortium, and Alaska Village Electric Cooperative. If a consulting firm is to be hired, identify at least three finalists, seek references from each of them, and contact each reference. Request that proposals from prospective firms include such information as experience working with cooperatives, a plan for back-up personnel support, and a fee schedule. Be sure you know who will be assigned to do the actual work.

Q: Can a Rural Utility Cooperative function with my organization?
A: Yes, cooperatives function with city and tribal governments, nonprofit organizations (e.g., school districts), existing utilities, homes, businesses and boroughs. For example, as part of its business structure the Yukon-Kuskokwim Health Corporation developed a Rural Utility Cooperative to assist rural villages with water and sewer operation and maintenance. The RUC was developed under YKHC’s Office of Environmental Health and Engineering, which has an environmental health program, a remote maintenance worker program, and other programs protecting public health.
YKH C manages the cooperative in partnership with the seven Yukon-Kuskokwim Delta communities that have joined to date. Partnership terms vary from village to village, are individually negotiated, and are specified in memorandums of agreement signed by YKH C and the communities. Consequently, one RUC manager oversees utility operation and maintenance at seven “RUC villages.” That number is expected to be 10 by the end of 2006.
The phases for successfully forming a RUC follow a certain sequence. Each phase should be completed before proceeding to the next. A group must select and agree on the criteria that constitute a green light to move from one phase to the following one, and which criteria might constitute a red light, signaling the need to abandon the process and explore other options.

The ultimate goal of developing a RUC may be reached only when the group forming it accomplishes six preliminary objectives. The group must:

- Agree that a compelling problem or opportunity exists warranting their attention.
- Agree that by developing some type of utility management structure they can address the identified problem.
- Reach an adequate level of trust among potential members.
- Secure commitment from members.
- Secure commitment from other key support group members.
- Assemble the staff and assets to start the RUC enterprise.

Attaining each of these objectives typically involves a set of activities common to cooperative formation. However, each group's journey along that path can vary or take longer than another. There is no hard and fast recipe for forming a RUC or a list of steps for all situations. With that in mind, the six phases common to the formation of Rural Utility Cooperatives are summarized in the table on the next page, which also serves as the executive summary for this section. Each phase is discussed in more detail in the chapters after the table.
<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
<th>Potential members</th>
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| 1. Identifying an opportunity | • Define critical questions.  
• Explore relevant problems or economic needs.  
• Check out successes in other communities.  
• Hold initial meetings to review scope and nature of cooperative solution.  
• Discuss, agree on scope and nature of problem/opportunity.  
• Research economic aspects of problem. |  
| 2. Building consensus on potential for cooperative | • Study organizational alternatives.  
• Discuss and agree on cooperative approach.  
• Pass resolutions of interest.  
• Create initial budget.  
| 3. Involving other support groups | • Secure necessary financing.  
• Formalize relations with customers and suppliers. |  
| 4. Developing trust among potential members | • Identify advisor to champion project.  
• Establish RUC Formation Group.  
• Agree on calendar and tasks.  
• Assign tasks.  
• Raise seed capital.  
• Retain manager.  
• Conduct feasibility study.  
• Agree on feasibility. |  
| 5. Securing member commitment | • Secure resolutions guaranteeing membership.  
• Develop detailed business plan.  
• Establish legal identity.  
• Create interim RUC Advisory Council.  
• Set up books/accounting sign-up (memorandum of understanding).  
• Launch cooperative. |  
| 6. Starting the cooperative | • Hold annual meeting.  
• Elect RUC Advisory Council.  
• Establish billing/collections system.  
• Establish physical address  
• Hire operators  
• Set up benefits plan (or use one of existing organization overseeing RUC).  
• Address issues from Regulatory Commission of Alaska |  

Potential members: Advisors, Consultants  
Community members: Community  
Members: Manager/CEO, Customers/suppliers  
RUC Formation Group: Potential members, Consultants, Advisors  
Interim RUC Advisory Council: Advisors  
Manager/CEO, Staff, Accountant, RUC Advisory Council
LESSONS LEARNED

Briefly, here are the phases Yukon-Kuskokwim Health Corporation went through to develop its RUC:

- Had idea to start a RUC.
- Obtained funding to do so.
- Asked who was interested in forming a RUC.
- Received proposal.
- Awarded project.
- Hired a manager.
- Solicited interest from communities to see who wanted to join.
- Obtained resolutions from the interested communities.
- Assessed operating structure options available.
- Set up legal operating structure.
- Set up RUC.
- Obtained further financing.
- Selected utilities to join the RUC.
- Formulated memorandums of agreement.
- Fixed up utilities.
- Operated utilities.
- Hired operators.
- Started billing.
- Started collecting.
- Implemented collection policy.
- Disconnected services of non-paying customers.
- Advisory Council met.
- User fees were increased to cover expenses.
At first glance, identifying the opportunity might sound like the simplest step in forming a Rural Utility Cooperative. In reality, it can be one of the most difficult and time-consuming. Because the decision to form a RUC involves a number of people and organizations that must each support the decision, a good number of meetings and discussions will typically be needed. In addition, early organizers may have differing views on the core problem to be addressed and how to solve it. They may have varying perspectives on the nature of the problem and on the extent a cooperative might actually remedy the situation.

An essential objective for this discovery phase of development is that the group of potential members must arrive at an agreement on the nature and importance of the problem to be addressed. Though one or a few individuals usually initiate the discussion, they must present a compelling enough reason to enlist the interest of the whole group in exploring organizational alternatives. In some situations, when the group is facing a challenge of major proportions such as utility sustainability, they may agree on a course of action more quickly than a group facing a less apparent problem.

**Initial RUC discussion**

Activities and outcomes common to this early phase of RUC formation include:

- **Holding open meetings to determine the scope and nature of the problem.**
- **Identifying examples and characteristics of success in your region.**
- **Emergence of a group of leaders through the discussion process.**
- **Agreement on the importance of the problem and the value of pursuing a RUC.**
- **Formation of a group to study the problem and to coordinate activities.**

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**Executive Summary**

- Identifying an opportunity for forming a RUC can be difficult and time-consuming. It varies according to each situation.
- At this stage, a consensus must be reached on the opportunity at hand.
- Meetings should be held to determine the scope and nature of the problem.
- It is likely that leaders will emerge through the meeting process.
- A RUC Formation Group must be established to spearhead development of the cooperative.
creating the formation group

creating the formation group is a key step in starting a ruc. the composition and qualifications of group members should not be taken lightly. they will assume important responsibilities such as determining the initial feasibility of a ruc and building trust among potential members. in many cases, formation group members may go on to serve as the interim board of directors for the ruc.

those considering becoming a member of such a group should realize that it requires a significant commitment of time, energy and sometimes finances as well. members must be available to see the project through to fruition. formation group participants should represent, to the greatest extent possible, the geographic area and demographic cross-section of the potential membership. members of the group should commit through a resolution from the city council, ira or both.

members of the formation group should have good business sense, a thorough understanding of the problem to be addressed, and at least basic knowledge of cooperatives. they should be respected members of the community and viewed as credible sources of information. they should have leadership ability and the reputation for putting the group interests before their own. people on the formation group must not use inside knowledge for personal gain or enter into arrangements that unfairly benefit relatives or associates. they must also be able to maintain strict confidentiality regarding the sensitive information they discuss.

many potential ruc members will base their decision to join on the credibility of the formation group. it will be next to impossible for each potential member to thoroughly examine all the ramifications of organizing a new ruc as outlined in this chapter. that responsibility falls on the formation group, whose members are expected to be responsive and articulate in answering questions from potential members and other support groups. once the problem is clearly identified and it is agreed that exploring the formation of a ruc is a mutual priority, the group can proceed to the next phase of development. this is only one way to form a cooperative. some groups may generate other ideas that will work better for their situation.
The Formation Group must answer several important questions at this point:

- Will forming a Rural Utility Cooperative create the right organizational structure to solve the group's problem?
- How will a RUC address the identified problem or seize the potential opportunity?
- How do the relative strengths and weaknesses of a RUC compare with other alternatives?

The discussion should begin with a review of what cooperatives can and cannot accomplish. An example would be a group attempting to cut purchasing costs by pooling purchasing power to secure significant discounts from suppliers. Depending on the type of services, there may already be a supplier willing to work with individuals to achieve a discount (bulk fuel, spare parts). On the other hand, the group may be able to generate the volume of individual purchases necessary to achieve the buying power to negotiate a greater discount or gain access to suppliers that are otherwise unobtainable.

Now, the Formation Group should seek information and advice on the detailed operations of the proposed cooperative. Identifying successful utility operations nearby can help the group build on the efforts and successes of others to easily expand options and reduce work effort. An in-depth feasibility study (a village business audit) is usually performed to determine whether the RUC can become a viable enterprise. A few of the many factors used to determine feasibility are willingness of communities to join and support the organization, expected economic returns from the RUC, and group decision-making capability. The group should also analyze the potential impact of the cooperative on its members.

The Formation Group should also assess any opportunities to work with existing cooperatives, such as Alaska Village Electric Cooperative, to avoid duplicating

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**Executive Summary**

- The Formation Group must determine whether a cooperative is the ideal means for addressing the problem identified in Phase 1.
- A feasibility study should be performed to determine whether the RUC will work.
- The possibility of working with existing cooperatives should be evaluated.
- The Formation Group must weigh the expected returns with the potential costs involved.
- A consensus must be reached as to whether the RUC is beneficial and feasible.
effort or building costly excess capacity when use of existing capacity would be the best approach. Alliances or joint ventures with other cooperatives may provide the best alternative rather than forming a new cooperative to undertake costly operations or invest in new utilities or assets.

Comparing the expected benefits to members with the expected costs involved with forming a RUC involves a complex analysis of the potential performance of the proposed cooperative. Once the Formation Group agrees that forming a RUC would be the best option, the process can move on to the next step.
A ny successful start-up cooperative relies on many support groups besides its members. Management, employees, funders, suppliers and customers are some of the non-member groups that must commit their support to the cooperative for it to succeed. Some of the organizations that can offer support are:

- **Rural Utility Business Advisor (RUBA)** program, which provides information on utility business management.
- **Remote Maintenance Worker (RMW)** program, which provides technical assistance on the operation and maintenance of rural utilities in Alaska.
- **Statewide Utility Association (SUA)**, which is run by Alaska Native Tribal Health Consortium (ANTHC), provides utility management services and coordination.
- **Alaska Utility Supply Center (AUSC)**, also run by ANTHC, provides an avenue to order utility parts for a reduced cost for rural communities.
- **Alaska Rural Water Association** provides consultation on water and sewer utilities, such as adhering to governmental regulations and training on utility operation.
- **Boroughs and regional health organizations**, which are umbrella organizations that provide resources at the local level.

**RUC manager**

Generally, it takes a particular style of management to get a new RUC off the ground. The manager should be astute in the workings of the RUC as well as sensitive to the workings of a membership organization. The individual should be able to balance the needs of the RUC with the needs of its members.

**Executive Summary**

- For a RUC to succeed, support should be secured from groups other than its members, such as management, employees, funders and suppliers.
- The manager hired to run the RUC should be versed in the style of management required to start the enterprise.
LESSONS LEARNED

The challenges of forming a RUC among rural Alaska villages that are only accessible via air or water, have sometimes severe weather, and have limited cash economies and resources, requires an individual with creative management skills and a strong desire to promote the public health of each community in the RUC.

In forming its RUC, YKHC had to go through several managerial candidates before finding one who had the appropriate leadership skills.

Manager’s education
- Minimum of a bachelor’s degree (or equivalent experience) with an emphasis in business management of some kind with skills associated with 1) accounting, 2) finance and budgets and 3) legal and cooperative principles would be an advantage.

Manager’s background
- Good communication skills including excellent writing ability
- Creativity
- Willingness to work in challenging weather conditions
- Experience in managing staff and working with the public
- For Outside candidates, ensure the candidate has a willingness to work in what may be considered an isolated environment with challenging working conditions
- Prior experience with utilities

The manager selected for the YKHC RUC faced many challenges, some very difficult. One challenge is that the manager must be both a utility advocate and enforcer. For example, the manager needs to ensure that customers receive the level of service they pay for while sometimes he has to be an enforcer by shutting off utility services to customers who don’t pay. This difficult position requires a diplomatic personality. Many potential managers are reluctant to face such challenges.

In hiring a manager the RUC members must have patience (don’t necessarily hire the first person to apply), perform a thorough background check on the candidates, and use an interview process that emphasizes the importance of the position and the challenges the manager will face.
Supportive partnerships

Though the YKHC RUC is, as of this writing, the only RUC in Alaska, the potential exists for several others. Each RUC involves partnerships in funding potential utility management programs, logistics, coordination, travel, a working understanding of the problems and needs of rural Alaska sanitation, and having working relationships with Alaska’s rural communities and organizations. These factors require a person or organization to help coordinate activities associated with forming and operating Rural Utility Cooperatives.

One such program is the Statewide Utility Association (SUA), a program within the Alaska Native Tribal Health Consortium, Division of Environmental Health and Engineering, Tribal Utility Support Department. This program provided support and coordination to the YKHC RUC during its start-up and operational stages. The SUA provided input and direction in creating a marketing strategy, finding funding opportunities, procuring resource information and other administrative and operational support functions as requested. It also provided interim management when the YKHC RUC was between managers.

The SUA was key in creating continuity between partnering funding organizations and agencies in helping the YKHC RUC to move forward. This resource remains an important piece in creating any new Rural Utility Cooperative throughout Alaska. For example, the SUA provides business support functions, technical expertise and financial and operational experience to local leaders who wish to form a RUC. This support should be considered as a resource when seeking to create a partnership to enhance local utilities and future sustainability efforts.

The following organizations partnered with YKHC and generously contributed technical expertise and funding in developing its RUC:

- Denali Commission
- U.S. Environmental Protection Agency
- Rasmuson Foundation
- U.S. Department of Agriculture, Rural Development
- Alaska Native Tribal Health Consortium

Without the support of these organizations, YKHC’s RUC, and subsequently a RUC model, might not have been achieved. Financial support and capital
requirements are key factors for beginning a Rural Utility Cooperative.

**Alaska Utility Supply Center**

The costs of operating a RUC are a primary consideration when thinking about support groups that can or should be involved. The parts and equipment needed for utility operation are a principal component of operating costs. Within the Statewide Utility Association is a program called the Alaska Utility Supply Center (AUSC), which procures parts and equipment for rural utilities.

This AUSC is able to buy parts and equipment in bulk, which lowers the cost for those items, resulting in a reduced unit operating cost for the utilities that buy their equipment and parts from AUSC. When considering a RUC, the AUSC’s purchasing power is important in order to help keep the costs of utility services to a minimum.

Some of the up-front costs associated with forming a RUC include purchasing critical spare parts if necessary and replacing depreciated and worn out parts and equipment. Because many utility plants in rural Alaska are reaching the end of their service lives — approximately 20 years or more in age — the condition of some of their parts and equipment is important to consider before accepting a utility into a RUC. It is crucial to take a complete inventory of what needs to be replaced and spare parts that must be replenished. Once the inventory is complete, it can be submitted to AUSC for a cost analysis, which will provide a good idea of the costs associated with bringing a utility up to an operational level where it can be accepted into a RUC.

Some villages that joined the YKHC RUC, for example, had high overhead costs due to limited availability of spare parts and parts that needed to be replaced. This leads to high overhead costs, which can make or break a Rural Utility Cooperative. Some utilities are in such poor shape that a RUC cannot afford to consider them for membership. In these cases other funding alternatives can be sought. Capital project dollars, for example, can be awarded through agencies such as State of Alaska, Village Safe Water Program, or the Alaska Native Tribal Health Consortium. These awards can help offset the initial start-up costs of forming a RUC.
Trust is essential in laying the groundwork for securing member commitment to form and support the RUC. Since the Formation Group members are the initial champions for the project, it is crucial that they are able to nurture trust among the prospective members and other support groups.

As part of this phase, the Formation Group may have to seek seed money to assist with the development of a business plan or conduct surveys of member communities and organizations in the RUC. Obtaining grants is one way to fund such activities.

Evaluating feasibility

A key step in building trust is to perform a thorough evaluation of the economic feasibility or an audit of the proposed RUC. An effective study assesses the specific situation and potential for success of the RUC. Some of the questions the study should address include:

- How many members will the cooperative need to be successful?
- Does the area have enough obtainable members to be served?
- Are qualified villages willing to commit to forming and directing the RUC?

The survey process can help determine whether prospective members will join the RUC. Useful information to gather includes:

- Attitudes toward a RUC in general.
- Location of prospective members.
- Size or type of current utility system and village population.
- Long-term utility needs of potential participants.
- Existing costs.

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Executive Summary

- The Formation Group must be trustworthy and convey that image to potential RUC members and to the community at large. This is important for establishing credibility and securing community support.
- The Formation Group may secure seed money to pay legal fees or to hire a firm to conduct a feasibility study or survey villages. Grant money is a possible way to obtain this money.
- Key indicators should be used to assess the feasibility of including a utility in a RUC: finance, accounting, taxes, personnel, organizational management, and operation of the particular utility.
- Once the feasibility study is done, the Formation Group should form a legal entity: a corporation.
- Articles of incorporation and bylaws must be written. Legal counsel is best consulted at this stage in RUC formation.
- Other legal documents, such as memorandums of agreement and membership applications, should be drafted in this phase, too.
- Existing revenues.
- Billing and collecting methods.
- Operator certification.
- System level.
- Willingness to invest in the RUC.
- Willingness to use the cooperative, once formed.
- Willingness to abide by the proposed memorandum of agreement.

In reviewing communities for inclusion in a Rural Utility Cooperative, the Alaska Department of Commerce, Community, and Economic Development has developed the following checklist of capacity indicators:

FINANCES
Essential Indicators
- The utility has all its revenue and expenses listed in its budget.
- The utility has adopted a balanced, realistic budget.
- Monthly financial reports are prepared and submitted to the policy-making body.
- The utility is receiving revenues (user fees or other identified sources) sufficient to cover operating expenses.

Sustainable Indicators
- The utility is receiving revenues (user fees or other identified sources) sufficient to cover operating expenses and repair and replacement costs.
- Year-to-date revenues are equal to or above those budgeted.
- Year-to-date expenditures are equal to or below those budgeted.
- A monthly manager's report is prepared.
- Budget amendments are completed and adopted as necessary.

ACCOUNTING SYSTEMS
Essential Indicators
- The utility has adopted a collection policy and follows it.
- The utility bills customers on a regular basis.
- An accounts receivable system is in place to track customers and to report past due accounts and amounts.
- An accounts payable system is in place.
• The payroll system correctly calculates payroll and keeps records that allow staff to complete payroll tax reports and deposits on time.
• The utility has a cash receipt system that records incoming money.
• The utility has a cash disbursement system that records how money was spent.

**Sustainable Indicators**

• The utility has a chart of accounts that identifies categories in a reasonable, usable manner.
• Monthly bank reconciliations have been completed for all utility accounts.
• The utility has implemented a purchasing system that requires approval prior to purchase, and the approval process compares proposed purchases to budgeted amounts.
• The utility maintains a capital repairs and purchases reserve and, if necessary, a loan repayment reserve.

**TAXES**

**Essential Indicators**

• The utility has a system to accurately calculate, track and report payroll tax liabilities.
• The utility is current on filing tax reports.
• The utility is current on making tax deposits.
• If there are any past tax liabilities, a repayment agreement has been signed and repayments are current.

**PERSONNEL SYSTEM**

**Essential Indicator**

• The utility has posted a workers’ compensation insurance policy that is in effect.

**Sustainable Indicators**

• The utility has adopted and uses a personnel policy, which has been reviewed by an attorney, AML or DCED for topics and language.
• The utility has adequate written job descriptions for all positions.
• The utility has adopted and follows a written personnel evaluation process that ties the job description to the evaluation.
• The utility has an adequate written hiring process.
• The utility has personnel folders on every employee that contain at least a Job Application and Letter of Acceptance.
• The utility has a probationary period for new hires that includes orientation, job-training/oversight and evaluations.
• The utility provides training opportunities to staff as needed and available.

ORGANIZATIONAL MANAGEMENT

Essential Indicators
• The entity that owns the utility is known and the entity that will operate the utility is set.
• The policy-making body is active in creating the policies of the utility (i.e., sets rates appropriately, passes budgets in a timely manner, adopts policies, plans, and considers other matters brought before it).
• The policy-making body enforces utility policy.
• The utility has an adequately trained manager (does not have to have a job title, but performs the job responsibilities).
• The utility has an adequately trained bookkeeper (does not have to have a job title, but performs the job responsibilities).
• The utility has an adequately trained operator(s) (does not have to have a job title, but performs the job responsibilities).
• The utility has adopted the necessary ordinances (or rules and regulations) necessary to give the utility the authority to operate.

Sustainable Indicators
• The utility has adopted an organizational chart that reflects the current organizational structure.
• The policy-making board meets as required.
• The utility complies with the state Open Meetings Act for all meetings.
• If the utility uses computers, staff has adequate training on both hardware and programs.

OPERATION OF UTILITY

Essential Indicators
• The utility operator(s) are actively working toward necessary certification.
• The utility has a preventive maintenance plan developed for the existing sanitation facilities.
Sustainable Indicators

- The manager receives a monthly operations and maintenance report from the utility operator and routinely “spot checks” the facilities to see that the daily, weekly and monthly maintenance items are in compliance.
- The utility has a safety manual and holds safety meetings.
- Utility facilities have not suffered any major problems/outages due to management issues that are still unresolved.
- The utility is operating at the level of service that was proposed.
- The operator routinely provides status reports to the manager.
- The utility has completed and distributed its Community Confidence Report (CCR).
- The utility is not on the Significant Non-Compliance (SNC) list.
- The utility maintains an inventory control list.
- The utility maintains a critical spare parts list.

LESSONS LEARNED

When the villages on the Yukon-Kuskokwim Delta were sent letters asking whether they wished to learn about how a Rural Utility Cooperative might function, 20 responded with resolutions of interest.

A third-party evaluation was then performed in these villages to establish the baseline capabilities of utility operation and maintenance. Many aspects were evaluated including operator training and turnover rate, water production, level of fuel supply, and billing rate. Seventeen capacity indicators were identified and a numeric score was applied to each. Adding the scores identified overall utility performance: A higher score means higher performance. Capacity indicators are also used to measure how aspects of utility performance change over time in each RUC village.

As a result, these 20 villages were ranked based on utility performance. The top 10 were then visited to discuss the details of possibly forming a RUC.

When identifying villages for potential RUC membership, it’s wise to focus first on those with piped water and sewer systems. Managing piped utility systems is more cost-effective and easily controlled than honey bucket and/or flush-and-
haul systems, which have many uncontrolled processes. Managing a honey bucket haul system, for example, involves an inability to shut off service due to lack of payment and a limited ability to enforce collection. By comparison, the manager of a piped water and sewer system can control the delivery of utility services.

Many other factors must be included when considering whether a village should be considered as part of a RUC. Those factors include:

1. **Forecast current billing processes and revenues collected to determine overall annual average revenue.** It is important to know how billing practices have been operating within this community, such as what is the current collection rate? How much has been collected? What is the current billing process? Are there any special deals in existence (for example, does the utility serve Elders for free or does the school trade water for the cost of electricity)? Get at least six months of billing and collection records if available.

2. **Check to see what equipment and tools will be part of the utility system for that village.** In other words, is the utility responsible for maintaining and operating the city dump truck or does the village government fund it? If a RUC needs equipment, it’s better to rent it from the village on an as-needed basis, which helps reduce overall operational costs and keeps the RUC out of the heavy equipment operating and maintenance business.

3. **When considering RUC villages, one must consider the number of utility connections to help determine utility revenue.** Some village homes, for example, might lack indoor plumbing, be uninhabitable, or may not be occupied year-round. Therefore, it’s important to know the exact number of homes that are billable as part of the utility system, the number of businesses as part of the utility's commercial billing rate, and the number of institutional customers, such as schools, Head Starts and day care facilities. Rates for all these customers should be established and negotiated fairly. In many cases what you think may be a billable connection may in fact be an abandoned home, or a home not connected to the utility system. Establishing the number and nature of utility connections in a community will help avoid confusion when creating billing and collection records.
4. Look for financial records that will help you make informed decisions. It was found that in many potential RUC villages YKHC assessed, record keeping was at a minimum. Many times by checking with the RUBA Program some historical data may be obtained that may help you to make an informed decision.

5. Check with RUBA to see whether villages that are considered for a RUC are taking a leading role in utility management. Many villages work closely with RUBA in creating an annual utility operating budget to forecast future utility costs.

6. Take an accurate inventory of the supplies and spare parts that are actually at the utility, as well as the type of connections in the village. Depending on when the village water system was built you may have multiple types of connections. During the YKHC project it was also found that the as-builts were either unavailable or incorrect. The overall condition of the utility must also be assessed, and a list made of what needs to be done to bring the plant up to speed.

7. Look for tax problems: For example, does the village owe any IRS debt and, if so, is there an agreement for paying off that debt? If there's tax debt and no agreement in place, you may be taking on a huge deficit, which could jeopardize the operation and maintenance of the RUC.

8. Bulk fuel purchase expenses must be determined so you can properly budget and sustain the utility. Examine the utility's records to determine what the average fuel costs were over the past year. Fuel is one of the major expenses in operating a utility system. To reduce the cost of fuel, buying it in advance and in bulk can save a substantial amount of operating revenue. This equates to an economy of scale purchase.

9. Obtain past records of electrical costs. If they are not available at the village accounting level, then consult Alaska Village Electric Cooperative. These records are important to help budget the overall operational cost of running the utility. This data can also provide valuable information when operating the utility because it may be possible to reduce electrical consumption by running the utility at a more optimal level.
10. Significant Non-Compliance list: Check with the Alaska Department of Environmental Conservation to see if the utility is in compliance with the Safe Drinking Water Act. All communities that distribute water to the public must be in compliance with water quality standards. These standards include consumer confidence reports, nitrate testing, volatile organics and bacteriological to name a few. A RUC manager is responsible for meeting water quality standards and keeping the community off the SNC list. Maintaining these standards is also important to meet RUBA capacity indicators in order to compete for project utility upgrade funds.

Utility Operators

When considering a village as part of a RUC, you must consider the skill level and training of current utility operators, and of potential future operators. Also, membership in the RUC requires identifying both a primary and backup operator. This is because when the primary operator isn't available the secondary operator takes over utility function. The cost of training and licensing two operators must be considered.

Operators who are part of the RUC must be licensed at the level identified by the State of Alaska for the size and classification of the specific utility system. In addition to the cost of training and licensing, utility operators must be paid a fair wage in order to minimize employee turnover and retain good, reliable employees. The RUC in the YKHC region pays operators according to a structured pay scale with advancement for increased certification and longevity, and provides a benefit package that includes retirement, vacation and health insurance.

As a result, the YKHC RUC has greatly lowered its turnover of utility operators. This reduces the long-term operating costs because there are fewer training and hiring costs.

What every utility should consider in its budget

Fundamental items to consider in a RUC budget are expenses and revenues as well as initial start-up and operating costs, such as tools, emergency equipment or
a billing and collection system, just to mention a few. See a sample budget in Appendix C at the end of this publication for more details.

**Legal documents**

Necessary legal documents may include membership applications, village/enterprise memorandums of agreement, membership purchasing agreements, meeting notices, and waivers of notice. Please contact Alaska Native Tribal Health Consortium for examples of these documents. In the case of a start-up cooperative, agreements may need to spell out the potential members' rights and responsibilities as the process of forming the new RUC unfolds.

Of particular note is the membership application. Depending on the competitive environment, such a document allows the cooperative to function effectively by ensuring sufficient control over the quantity, quality and delivery of service to be committed to a particular entity. This is especially helpful in the first few years of operation when the cooperative is establishing its reputation as a responsible, successful enterprise.

**LESSONS LEARNED**

Obtaining legal counsel will be necessary to ensure that the unique requirements and characteristics of individual organizations are considered and/or included in establishing the organizational framework of the RUC.
Phase V: Securing member commitment

The next phase of developing a cooperative involves securing enough commitment from potential members to create a viable organization. Activities related to enlisting commitment usually include analyzing potential risk and completing a detailed business plan. These efforts will require the Formation Group to define member communities’ rights and responsibilities, assess the need and skills for management/staff, and project the required level of and sources for financing.

An analysis should be performed to determine how changes in variables like prices, interest rates, government policy and availability of supplies might affect the business plan between the time required to secure members and the actual start-up of the business.

Executive Summary

- Securing member commitment is essential in creating a viable organization.
- Potential members must be informed of the risks involved in joining the RUC, as well as the strategies the RUC will use to address those risks.
- A detailed business plan should be written.
- Members’ rights and responsibilities must be defined.
- The level and sources of funding will need to be determined.
- A balanced start-up budget will need to be written.

LESSONS LEARNED

Setting up a community meeting is a key step in securing — or not securing — a community’s commitment to join a RUC. It’s an opportunity for homeowners, city council members, business owners and others to ask questions about how a RUC would function in their community.

Before community members and leaders decide to join a RUC it’s imperative that they understand their responsibilities, as well as the RUC manager’s responsibilities. This includes how revenues would be collected and used. For example, they should agree that revenues generated by the utility would only pay for utility operation and maintenance, not other village services or debts.

Communities must also know that, after joining a RUC, utility bills will probably increase. Such increases may occur because a RUC manager, using years
of utility experience, may find that revenues must increase to operate the utility in a financially sustainable manner. In other words, the utility might have been operating at a loss or with equipment that must be replaced.

**Analyzing any potential risk**

A key step in securing member commitment is describing and analyzing any potential risk(s) associated with the venture as well as presenting strategies that the RUC will use to manage those risks.

**Operating criteria to consider**

Any new RUC may incur a certain level of risk commonly associated with start-up operations. The following questions highlight some of the potential risks:

- Is the start-up timetable reasonable?
- Are the operating assumptions reasonable?
- Are full capacity expectations reasonable?
- Are management and/or operators qualified to run the RUC in compliance with state and federal regulations?
- Will the utility be run efficiently and produce a quality product?
- Are accounting procedures in place to identify operating strengths and weaknesses?
- Are facilities properly protected and safe to operate?

**Financial criteria to consider**

Financial needs associated with starting new cooperatives include the following:

- Is a balanced start-up budget in place? (Begin work on financial business plan.)
- What strategic limitations will/may grantors impose on the cooperative?
• Is funding available from federal, state or nonprofit sources?
• Are accounting and auditing procedures adequate to protect members?
• Has the operational status of the utility been documented?

LESSONS LEARNED

Before joining a RUC, a utility must have a billing/collection system in place. The system must also be at a certain operating level before the utility joins.

When managing a RUC, the accounting and billing of utility services is critical. As with any other service program, there is a cost associated with services provided. Water and sewer services are provided to customers at a cost established by a rate analysis. This equates to a monthly fee that is collected from each utility customer; that money, in turn, is used to pay for operational expenses. These expenses include management costs, electrical, fuel, labor and replacement parts. It is almost impossible to include capital replacement costs when these costs are so high and are really not affordable at the community level.

The revenue generated through utility fees is therefore critical to enable utilities to move toward economic sustainability. In other words, revenues should match expenses. This is the ideal, which may occur in some communities and might be achieved through tight management practices. However, in those villages where this may not be attainable, possible supplemental funds are needed.

The cost of operating and maintaining utilities in rural Alaska is high. Strong financial and accounting management are key factors in maintaining economic stability for rural utilities. A RUC, therefore, focuses on a high level of utility service with a strong emphasis on record keeping and tight management practices; these help keep costs down while maintaining a high public health component. This often becomes a balancing act between deciding a utility’s level of service and maintaining the utility to protect community health.

A Rural Utility Cooperative should plan ahead financially. The YKHC RUC model has demonstrated that an operating budget is crucial to successful utili-
ty management and sound financial performance. Every attempt must be made to alleviate possible cash operating shortfalls and unexpected emergency costs. For example, a gap in budget might occur when a loss of utility service occurs due to an unexpected part failure. The replacement cost might not be included in the RUC’s budget. This situation can greatly impact the RUC’s ability to manage a utility well due to cash shortfall and may eventually impact the utility’s level of service.

Organizational issues to consider

Many unknowns are involved in forming a cooperative. Prospective RUC members may ask pertinent questions about the organization before deciding whether to join:

• Are strategies in place to manage the risks associated with the cooperative?
• Is the RUC Advisory Council comprised of the most qualified and effective people available?
• Is the organization incorporated and properly organized?
• Do the bylaws and member agreements clearly spell out the rights and responsibilities of members and the cooperative in relation to members?
• Have adequate management policies and controls been adopted?
• Did a qualified accountant set up the books and financial record-keeping systems?
• Does/will the RUC Advisory Council ensure that an accounting firm familiar with cooperatives performs an annual audit?
• Has the cooperative’s strategic plan been well prepared?
• Are the key decision-makers (RUC Advisory Council members, manager, etc.) up to the task at hand?

LESSONS LEARNED

Under the YKHC model, the RUC is structured within the corporation’s Office of Environmental Health and Engineering.
Whether entering a joint project, such as the YKHC model, or as a stand-alone organization, there must be a clear understanding of how information such as financial, legal, personnel, liability and the overall general operation of the RUC will be shared among or between the involved parties.

There may be some instances where information, such as minor administrative matters, may be slow in coming, which is acceptable when proper notice is given. Information that should not be slow in getting to the involved parties is operational data, such as funds not being available for a water treatment plant pump that has failed, regulatory testing results, and daily equipment operating readings. Such data is essential for allowing RUC members to review how well each utility is running. By freely sharing information, each contributing party will be better able to complete its part in the program and the overall operational management processes of the utility to protect public health.

**Formation of a business plan**

The business plan describes strategies the cooperative will use to address potential risks and establishes the guidelines under which the cooperative will operate. Some of the risks associated with forming and operating a cooperative have been described previously in this publication. The plan should include the components of a business plan developed for any type of firm, cooperative or otherwise. Good references on writing a business plan are plentiful and easily obtained.

A solid business plan includes a set of financial projections including data such as operating statements, balance sheets and cash flow statements for at least three years. These should utilize cooperative accounting and financing practices.

An advisor or consultant, especially one with experience in cooperatives and the industry of the RUC's operation, can be a valuable resource in writing the plan. The manager, if hired at this point, should also play a role in its creation. A business plan should not be seen as just an exercise that a funding source might require the group to undertake. The plan is meant to be a useful tool for building confidence among prospective members, and it sets benchmarks for evaluating the organization's performance and for making decisions.
The plan should include a governance structure to ensure that an effective decision-making capacity is designed. It should identify the management skills required to implement the plan, and it can become the strategic “to do” list for the first manager.

An appendix to the plan should include the adopted or proposed articles of incorporation and bylaws, as well as other pertinent legal documents such as membership agreements, resolutions and funding documents. Manager and director position descriptions as well as resumes of key individuals, such as directors and management, can help attest to the quality of the key people involved.

Potential cooperative members should, at this point in the development of the cooperative, have a high level of confidence in the success of the RUC. A thorough analysis indicates to them that the operation is economically feasible, and a detailed business plan provides a clear picture of the strategies that will be adopted to operate a successful RUC management program. Potential members should now have all the information they need to make a decision on whether to join.

Formation Group members should demonstrate a thorough understanding of the business plan by taking responsibility to follow through with it. It might be beneficial, however, to also involve key partners such as advisors, funders, potential customers or management. Presentations from consultants involved in conducting the feasibility study or writing the business plan can also add credibility. A separate presentation or meeting might be advisable to present plans to potential funding agencies.

Members of the Formation Group play a vital role in this process. They are addressing their peers and arguing the case for forming the cooperative. They build confidence in the enterprise by taking the leap and being the first to sign on the dotted line. If a manager has been hired, he or she can help build confidence or implement the funding drive. In the end, prospective members must have enough trust in the individuals associated with the cooperative to have confidence that they will benefit from joining. Only then will they write that check for their investment in the new cooperative.

Contact the state’s Rural Utility Business Advisor program or Alaska Native Tribal Health Consortium to obtain copies of sample business plans to use as guidelines for developing a business plan for the RUC.
Phase VI: Achieving a successful start

What can RUC Advisory Council members, members, and managers of a RUC do to enhance its chances of success? An effective RUC Advisory Council teamed with qualified management is a key ingredient. A solid financial footing is essential, and an effective marketing strategy is a key element.

Potential obstacles to consider

One of the best ways to foster cooperation is to objectively determine and publicize the potential benefits that can be generated by cooperation. When individuals better understand the various “costs of independence” they may develop a clearer understanding of the potential benefits of cooperation.

New members often try to capture the benefits and avoid bearing the costs of belonging to a new Rural Utility Cooperative. It must be made clear that in order to achieve the benefits, members must recognize the costs. One cost is giving up some independence and abiding by group decisions. This is usually achieved through binding membership agreements that clearly spell out the level of participation each individual will commit to.

Executive Summary

- For a RUC to succeed it needs an effective RUC Advisory Council, solid financial footing, and sound marketing and purchasing strategies.
- Members must cultivate a spirit of cooperation, rather than competitiveness.
- An annual meeting will need to be held, and a RUC Advisory Council elected.
- Staff must be hired to run the utility(ies).

Involvement of leaders

The roles and involvement of different leaders evolve throughout the development of the RUC. Those who promote the concept and establish the Formation Group assume a high degree of involvement during the early phases of RUC development. Once a RUC manager is hired, his or her role increases as he or she assumes a number of responsibilities from the Formation Group. Following formation of the cooperative and election of a RUC Advisory Group, the manager
becomes an even more important player. At that point, the involvement of members and the Formation Group tapers off some.

For the cooperative to function effectively, the various key players must be willing to adapt their level of involvement to meet the situation as it changes. The Formation Group must also be aware of what its role really is as the RUC shifts from being a concept to becoming a real part of utility management operation in rural Alaska. Basically, it changes from doing everything to handing over all operational issues to management. Member involvement increases significantly during the pre-start-up phase and peaks at the start-up when the management becomes more involved.

Management becomes steadily more involved after hiring, through the start-up, and into the post-start-up phase.

**Ingredients for success**

Let us begin by reviewing the two necessary conditions for the successful establishment of a RUC.

- First, there must be joint (two or more individuals) recognition of a common economic problem. It is crucial here to identify the real problem, not just the symptoms of the problem. Also, all parties involved should have a uniform understanding of the problem.

- The second condition is that the proposed Rural Utility Cooperative should be more efficient in performing the service than individuals acting alone. In economic terms, can the new RUC achieve economy of scale? Economy of scale can arise through better use of personnel, equipment or other resources, as well as by the sharing of expense or risk management. It can be difficult and risky for a single utility to finance, organize and operate, but collectively the same task may be accomplished efficiently.

It is important to identify effective leaders at an early stage, encourage them, and reward them for their efforts, even if it's only with a few supportive comments. Leaders are the driving force in cooperative endeavors. They achieve compromise
among participants. They overcome barriers and obstacles. They see worthwhile efforts through to completion. Consequently, it is imperative that any cooperative effort has the required advisory backing.

LESSONS LEARNED

The RUC Advisory Council should be made up of key personnel from each RUC membership village. This helps to ensure that communities stay involved in utility operation and management, and always retain ownership of their utilities. In the YKHC model, RUC Advisory Council members were selected from the leadership of each RUC village. These members are often mayors, who are elected by community members, and village administrators, who typically oversee utility management, among other duties, and are usually hired by the community leadership. Other people to choose for the RUC Advisory Council are community council members, or someone known throughout the community as a respected Elder or leader.

The individual(s) chosen for this position should possess a variety of skills and knowledge, such as:

- Good communication skills
- Reputation as a strong community leader
- Working knowledge of community’s utilities
- Willingness to improve the community’s public health
- A genuine concern for the customers’ needs
- Ability to work cooperatively with other Council members
- Commitment to the community’s future

One of the roles of Advisory Council members is to make recommendations to the RUC manager on how the RUC is performing within each community, and includes acting as a liaison between the customer and the RUC manager. This role requires Advisory Council members to have a strong commitment to improving public health by balancing their role as a community member and as a RUC advisor.
Since RUC Advisory Council members gather information from customers in their respective communities, they play a crucial part in providing input for forming RUC policies and procedures. Also, when members of the RUC Advisory Council share concerns and ideas at Council meetings, this information often benefits other member villages that are having similar experiences.

When the YKHC RUC Advisory Council was formed, the Northwest Cooperative Development Center — a nonprofit organization based in Washington — was hired to help train its members for their important roles. The organization, which has a long history in developing cooperative businesses, has staff available for cooperative management training.
The structure of a Rural Utility Cooperative offers a viable alternative for operating and maintaining Alaska rural utilities. Developing an effective, sustainable RUC requires strong commitment and advice from its potential members and a number of other partners. There is no single path for developing a RUC, but potential members and partners can draw from a wealth of common experiences. The experiences of the Yukon-Kuskokwim Health Corporation pilot RUC included in this manual adds to our understanding of what it takes to create and nurture a Rural Utility Cooperative. Those interested in developing a cooperative can call upon a significant number of resources and supporting organizations, such as the Alaska Native Tribal Health Consortium and Yukon-Kuskokwim Health Corporation. Creating a solid and well-grounded cooperative is a challenging endeavor, but the result will benefit the economic and social well-being of member communities.

For further information on RUC operational procedures, please contact:

Alaska Native Tribal Health Consortium (ANTHC)
Tribal Utility Support Department
1-800-560-8637

- or -

Yukon-Kuskokwim Health Corporation (YKHC)
Office of Environmental Health and Engineering
1-800-478-3321

YKHC RUC villages:

Alakanuk  Toksook Bay  Chevak
Grayling  Russian Mission  Upper Kalskag
Holy Cross


Resources in Alaska

USDA, Rural Development
800 W. Evergreen, Suite 201
Palmer, AK 99645
907-761-7705
www.rurdev.usda.gov/ak

Environmental Protection Agency
222 W. 7th Ave, #19
Anchorage, AK 99513-7588
907-271-5083
www.epa.gov/region10/

Alaska Native Tribal Health Consortium
Tribal Utility Support Department
800-560-8637 (toll-free)
www.anthc.org

Yukon-Kusokwim Health Corporation
Office of Environmental Health and Engineering
800-478-3321 (toll-free)
www.ykhc.org

Denali Commission
510 L St., Ste. 410
Anchorage, AK 99501
888-480-4321 (toll-free)
www.denali.gov

Rasmuson Foundation
301 W. Northern Light Blvd., Suite 400
Anchorage, AK 99503
907-297-2700
877-366-2700 (toll-free within Alaska)
www.rasmuson.org

Regional and U.S.
Cooperative Development Resources

Northwest
Northwest Cooperative Development Center
1050 Capitol Way South, Suite B
Olympia, WA 98501
360-943-4241
www.nwcdc.coop

Washington State University
Cooperative Extension
121 C Hulbert Hall
Pullman, WA 99164
509-335-2972
http://ext.wsu.edu/

Northeast
Northeast Cooperative Council
203 Warren Hall
Cornell University
Ithaca, NY 14853-7801
607-255-8800
http://cooperatives.aem.cornell.edu/
partners.htm

Pennsylvania Council of Cooperatives
662 Kempshire Road
Patton, PA 16668-5510
814-674-2362
<table>
<thead>
<tr>
<th>Northeast USDA Rural Development Offices</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cooperative Development Contacts</strong></td>
</tr>
<tr>
<td>USDA Rural Development</td>
</tr>
<tr>
<td>Community Facilities, Rural Utilities, &amp;</td>
</tr>
<tr>
<td>Cooperative Development</td>
</tr>
<tr>
<td>99 Fort Fairfield Road</td>
</tr>
<tr>
<td>Presque Isle, ME 04769</td>
</tr>
<tr>
<td>207-764-4155</td>
</tr>
<tr>
<td><a href="http://www.rurdev.usda.gov/me/Offices/">www.rurdev.usda.gov/me/Offices/</a></td>
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<tr>
<td>PresqueArea.htm</td>
</tr>
<tr>
<td>USDA Rural Development</td>
</tr>
<tr>
<td>Community and Business Program</td>
</tr>
<tr>
<td>P.O. Box 405</td>
</tr>
<tr>
<td>Bangor, ME 04402-0405</td>
</tr>
<tr>
<td>207-990-9160</td>
</tr>
<tr>
<td><a href="http://www.rurdev.usda.gov/me/Offices/">www.rurdev.usda.gov/me/Offices/</a></td>
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<td>BangorArea.htm</td>
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<tr>
<td>USDA Rural Development</td>
</tr>
<tr>
<td>Community Outreach</td>
</tr>
<tr>
<td>10 Ferry Street, Suite 218</td>
</tr>
<tr>
<td>Box 317, Concord Center</td>
</tr>
<tr>
<td>Concord, NH 03301</td>
</tr>
<tr>
<td>603-223-6035</td>
</tr>
<tr>
<td>USDA Rural Development</td>
</tr>
<tr>
<td>Rural Business and Cooperative Development</td>
</tr>
<tr>
<td>RR #3, Box 27 F</td>
</tr>
<tr>
<td>Montrose, PA 18801</td>
</tr>
<tr>
<td>717-278-2542</td>
</tr>
<tr>
<td><a href="http://www.rurdev.usda.gov/pa/">http://www.rurdev.usda.gov/pa/</a></td>
</tr>
</tbody>
</table>

| USDA Rural Development                   |
| Community, Business and Cooperative     |
| Programs                                |
| 3rd Floor, City Center, 89 Main Street  |
| Montpelier, VT 05602                    |
| 802-828-6010                            |
| www.rurdev.usda.gov/vt/nnhos.htm        |

| Northeast Nonprofit Cooperative          |
| Development Organizations                 |
| Cooperative Development Institute        |
| Lynn Benander, Director                  |
| 324 Wells Street                         |
| Greenfield, MA 01302                     |
| 413-425-6795                             |
| www.cooplife.coop/aboutcdi.htm           |

| National Professional Organizations      |
| Cooperative Communicators Association    |
| 5307 43rd Street                         |
| Lubbock, TX 79414-1315                   |
| 806-795-2783                             |
| www.communicators.coop                   |

| National Society of Accountants for     |
| Cooperatives                             |
| 136 South Keowee Street                  |
| Dayton, OH 45402                         |
| 937-222-6707                             |
| www.nsacoop.org                          |
Nonprofit Organizations

Cooperative Development Foundation
1401 New York Ave., NW, Suite 1100
Washington, DC 20005
202-638-6222
www.cdf.coop

Cooperative Development Services
131 West Wilson Street, Suite 400
Madison, WI 53703
608-258-4396
www.cdsus.coop

Trade Associations

National Cooperative Business Association
1401 New York Ave., NW, Suite 1100
Washington, DC 20005
202-638-6222
www.ncba.coop

National Rural Electric Cooperative Association
4301 Wilson Boulevard
Arlington, VA 22203
703-907-5500
www.nreca.coop

National Telephone Cooperative Association
4121 Wilson Boulevard, Suite 1000
Arlington, VA 22203
703-351-2000
www.ntca.org

North American Students of Cooperation
Box 7715
Ann Arbor, MI 48107
734-663-0889
www.nasco.coop

Web Sites

International Co-operative Alliance (ICA)
www.coop.org

National Cooperative Bank (NCB)
www.ncb.coop

Rural Cooperatives Center, University of California, Davis
http://cooperatives.ucdavis.edu

University of Wisconsin Center for Cooperatives
www.wisc.edu/uwcc

Alaska Native Tribal Health Consortium
www.anthc.org

Yukon-Kuskokwim Health Corporation
www.ykhc.org

Denali Commission
www.denali.gov
Appendix:
Sample budgets

2003 Assumptions

<table>
<thead>
<tr>
<th>Population</th>
<th>450 (80 homes)</th>
<th>Qualified</th>
<th>$12.00</th>
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<tbody>
<tr>
<td>Water</td>
<td>piped</td>
<td>OIT</td>
<td>$13.00</td>
</tr>
<tr>
<td>Sewer</td>
<td>piped</td>
<td>Level I</td>
<td>$15.00</td>
</tr>
<tr>
<td>Fuel</td>
<td>barged ($1.85 per gallon)</td>
<td>Level II</td>
<td>$17.00</td>
</tr>
<tr>
<td>Electricity</td>
<td>generator ($0.33/kWh)</td>
<td>Level III</td>
<td>$19.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Level IV</td>
<td>$21.00</td>
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Operator Wages ........................................... $20,280.00
Alternate Operator Wages ................................ $6,240.00
Workers Compensation ................................... $1,310.09
Payroll Tax ............................................. $3,269.92
Fuel ...................................................... $21,119.60
Electricity ............................................. $30,115.01
Chemicals ............................................... $1,200.00
Regulatory Costs ....................................... $1,393.00
Miscellaneous Expenses ................................ $3,000.00
Equipment Replacement ................................ $2,500.00
Insurance ................................................ $2,500.00

Total Expenses ........................................... $92,927.62

Start-up Gap

- Year's supply of fuel.
- Tools.
- Increased hours to bring systems to standard.
- Regionalized emergency equipment.
- Regionalized tools.
- Billing and collection system.

Operating Gap

- Differential in standardized salaries (if any).
- Subsidizing equipment fund until fully established (7 years).

<table>
<thead>
<tr>
<th>Community</th>
<th>Monthly Electrical Consumption</th>
<th>Monthly Fuel Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambler</td>
<td>6182</td>
<td>1150</td>
</tr>
<tr>
<td>Kivalina</td>
<td>4140</td>
<td>595</td>
</tr>
<tr>
<td>Koyuk</td>
<td>9455</td>
<td>1109</td>
</tr>
<tr>
<td>Savoonga</td>
<td>10838</td>
<td>2854</td>
</tr>
<tr>
<td>Selawik</td>
<td>7409</td>
<td>951.3</td>
</tr>
<tr>
<td>Total</td>
<td>38024</td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>7604.8</td>
<td></td>
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2005 Actuals

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<th></th>
<th></th>
<th>Qualified</th>
<th></th>
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<td>Population</td>
<td>364 (76 homes)</td>
<td>$14.00</td>
<td></td>
</tr>
<tr>
<td>Water</td>
<td>piped</td>
<td>$16.00</td>
<td></td>
</tr>
<tr>
<td>Sewer</td>
<td>piped</td>
<td>Level I</td>
<td>$15.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Level II</td>
<td>$17.00</td>
</tr>
<tr>
<td>Fuel</td>
<td>barged ($1.96 per gallon)</td>
<td>Level III</td>
<td>$19.00</td>
</tr>
<tr>
<td>Electricity</td>
<td>generator ($0.23/kWh)</td>
<td>Level IV</td>
<td>$21.00</td>
</tr>
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</table>

Operator Wages .................................................. $38,698.00
Benefit Packages .............................................. $12,770.00
Contract Accounting ........................................... $4,200.00
Contract Labor ............................................... $1,868.00
Fuel ............................................................. $26,441.00
Electricity .................................................... $15,644.00
Consumables ..................................................... $840.00
Regulatory Costs ............................................... $3,220.00
Miscellaneous Expenses ....................................... $652.00
Equipment Replacement ......................................... $8,039.00
Travel and Per Diem .......................................... $1,335.00

Total Expenses ............................................... $113,707.00

<table>
<thead>
<tr>
<th>Community</th>
<th>Monthly Electrical Consumption</th>
<th>Monthly Fuel Consumption</th>
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</thead>
<tbody>
<tr>
<td>Holy Cross</td>
<td>4399</td>
<td>448</td>
</tr>
<tr>
<td>Grayling</td>
<td>7079</td>
<td>497</td>
</tr>
<tr>
<td>Toksook Bay</td>
<td>4046</td>
<td>277</td>
</tr>
<tr>
<td>Russian Mission</td>
<td>NA</td>
<td>152</td>
</tr>
<tr>
<td>Alakanuk</td>
<td>10011</td>
<td>551</td>
</tr>
<tr>
<td>Upper Kalskag</td>
<td>604</td>
<td>NA</td>
</tr>
</tbody>
</table>

(Note: Upper Kalskag not included in averages)

Total 25535 1925
Average 6383.8 385.0
January 4, 2006

Dear Ed:

This letter is to reiterate USDA Rural Development’s (RD) support of the efforts by Alaska Native Tribal Health Consortium (ANTHC) to expand Rural Utility Management Support Services through a Statewide Utility Association, the Alaska Utility Supply Center and Rural Utility Cooperatives (RUC). RD was pleased to offer funding of $100,000 to ANTHC in 2005 (FFY 2004 funds) to assist in these efforts.

RD’s 2005 budget appropriation offers the opportunity to provide an additional $99,200 in assistance toward developing a regional system for centralized billing, operation and management of rural water and waste utilities. We understand ANTHC is interested in receiving this funding to support the ongoing efforts of the RUC and that you have been in contact with Debby Retherford, our Rural Utilities Specialist, regarding the required paperwork. It is my understanding that as the only entity that has developed, and is actively engaged in, such a regional effort concerning rural water and waste utilities, ANTHC is positioned to make the best use of this appropriation. It is also my understanding that as part of this pilot project, you have developed a written analysis of your experiences in this effort and have made them and your organization available to assist other regional organizations interested in developing similar cooperatives. For these reasons, it is RD’s intent to provide this 2005 appropriation to ANTHC, and I encourage you to continue to work with Ms. Retherford toward that end. I also encourage you to include with your final report on the use of these funds a proposal for use of similar funds expected in the RD 2006 appropriation.

We are very pleased to be a part of this important and worthwhile project to support and sustain essential sanitation facilities in rural Alaska. Please feel free to call me at 907-761-7703, or Debby Retherford at 907-761-7726, if you have any questions. Let me also take this opportunity to thank you for all you do to improve the quality of life for Rural Alaskans.

Sincerely,

B.B. Allen
State Director
USDA, Rural Development
January 4, 2006

Dear Mr. Lohr:

Since the crafting of the Safe Drinking Water Act (SDWA) in the early 1970s, Congress has recognized the unique challenges that face small drinking-water systems. The original SDWA in 1974, and the major amendments in 1986, focused on developing and implementing a strong regulatory program based on monitoring and treatment. The general sentiment was that, in the face of a strong regulatory program, systems would make the changes necessary to comply. The Act authorized training and technical assistance to help systems, and provided exemptions for systems that faced compelling economic circumstances. The exemptions could be extended for very small systems.

By the late 1980s and early 1990s, it was clear that small systems were having great difficulty keeping up with the rapidly expanding SDWA-mandated regulations. There was also a growing recognition of a significant need for basic infrastructure repair and replacement, quite separate from any regulatory mandates. A few States were implementing “viability” initiatives, which sought to promote small system compliance, and otherwise address small systems problems, by ensuring that systems had the necessary underlying technical, managerial, and financial wherewithal. These programs showed great promise, and the concept of “small system viability” emerged as a major consideration in the early discussions about SDWA reauthorization.

As the debate on SDWA reauthorization progressed, however, it became clear that the term “viability” had at least two significant shortcomings. First, it promoted an unproductive focus on classifying systems as “viable” or “nonviable.” Second, it implied a static endpoint. The debate was really about finding a way to create a process through which systems could enhance their technical managerial, and financial capacity to ensure consistent compliance with the SDWA. Thus, the concept became known as “Capacity Development.” Capacity development implies a process, not a static endpoint, and does not promote a focus on rigid classification of systems as “having it” or “not having it.”

The SDWA Amendments of 1996 became law on August 6, 1996. While retaining the best of the previous Act, the Amendments create a new and strong focus on preventing contamination and non-compliance. They also greatly increase State flexibility, provide badly needed financial support and create a new ethic of public awareness and participation. The new provisions may be thought of as a tapestry; individual provisions are best understood not in isolation, but in the context of the whole.
From a small systems perspective, the major components of the tapestry are the new Drinking Water State Revolving Fund (DWSRF), Capacity Development, source water protection, operator certification, consumer confidence, and variances and exemptions. These provisions are closely interrelated. Capacity development, source water protection, and operator certification are directly linked to the DWSRF. A State may set aside funds from its DWSRF to develop and implement a program that addresses these three provisions. Capacity development and operator certification are also tied to the DWSRF through withholding requirements.

Capacity development alone can be thought of as a tapestry which weaves together all existing State drinking water program activities into a focused effort to help troubled small systems, such as through sanitary surveys, technical assistance, permitting and licensing, operator certification, etc. States can take advantage of DWSRF set-asides to prepare a capacity development strategy that is focused on a specific group of systems, such as significant noncompliers, or directed broadly toward systems that are out of compliance or will soon be out of compliance.

The State of Alaska has used DWSRF set-asides for programs such as the operator certification and has utilized Alaska Native Village infrastructure funding for the Remote Maintenance Worker (RMW) program to address the technical piece of capacity development and the Rural Utility Business Advisor (RUBA) programs to address the managerial piece of capacity development for the rural Alaska public water systems.

In addition to the above funding, the EPA has provided Clean Water Act 104(b)(3) funding to develop a pilot Alaska rural utility cooperative (RUC). The RUC was to demonstrate if capacity efficiencies could be realized for small water systems through regionalization and sharing of resources that capacity is dependent on. To date the RUC has shown that capacity efficiencies can be recognized if existing resources are pooled and common management practices are provided on a regional basis.

Sincerely,

Dennis Wagner, PE
Infrastructure Program Manager
US Environmental Protection Agency
Alaska Operations Office
December 23, 2005

To All Interested Parties:

The State of Alaska, Department of Commerce, Community, and Economic Development (DCCED), Rural Utility Business Advisor (RUBA) program has been asked to document its support of the Rural Utility Cooperative (RUC) pilot project currently being undertaken by the Yukon-Kuskokwim Health Corporation (YKHC).

The RUBA program works with boroughs, cities, tribal councils, and community nonprofit corporations to increase management and financial capacities of rural-owned water and wastewater utilities. RUBA has previously worked with all of the communities currently in the RUC on management issues. RUBA program staff also had frequent discussions with YKHC and RUC staff during development of the pilot program.

The RUBA program encourages continued support of the RUC pilot project. I would like to cite three examples to demonstrate why DCA supports continuation of the pilot project.

Further Evaluation of “Value” of Service—The water/sewer rates in the City of Holy Cross have doubled since the RUC has taken over. At the same time, the collection rate has greatly increased. These two factors generally have an inverse relationship in rural Alaska utilities. In Holy Cross, the RUC is demonstrating that by increasing the quality of service, you can increase charges and still keep customers satisfied. This relationship needs to be continued and evaluated.

Defining Regionalization Issues and Procedures—The purpose of the pilot project was to help define standards and procedures for other potential regional utilities. While a lot has been learned during the organization and startup phase, the RUC continues to explore management efficiency ideas. Over the past year, the RUC has made changes in how they do accounting. There are still a lot of lessons to be learned from operation of the pilot project.

Keeping Utilities Running—At least three of the utilities (Russian Mission, Chevak and Grayling) that the RUC has assumed responsibility for probably would not be operating if management had been retained by their respective communities. All three of these municipal governments have closed temporarily because of financial problems in the past 12 months. In the extreme case of Chevak, if it weren’t for the RUC, the new piped water/sewer system serving over 200 customers would have been shut down and winterized this winter. Having the RUC assume duty for this sys-
tem in particular is allowing the city to reorganize, reprioritize and decide how core services can or should be provided.

In summary, the RUBA program feels that significant management ideas and procedures should continue to be explored through the RUC pilot project. We encourage continued support of the program.

Sincerely,

Scott Ruby
Local Government Specialist V
State of Alaska
Department of Commerce, Community, and Economic Development
Rural Utility Business Advisor program
Recommendation to the Sustainable Utilities Steering Committee

From
The Cooperatives in Rural Alaska Subcommittee (CRAS)

Executive Summary

Cooperatives in Rural Alaska Subcommittee
Organizational Models for Utilities

Cooperative Models

The Cooperatives in Rural Alaska Subcommittee (CRAS) was established to provide a recommendation to the Sustainable Utilities Steering Committee regarding a cooperative-style utility service delivery model that is:

- Community driven
- Enhances management and operational efficiency
- Delivers high-quality, reliable service
- Improves regulatory compliance

Cooperatives were identified as desired vehicles for delivering utility services due to their success in other states in creating self-reliant and sustainable infrastructures within rural communities (see Appendix A, “Charter”). During the literature review, it became evident that many forms of multi-community utility organizations, in addition to cooperatives, have successfully delivered utility services. The CRAS has identified and catalogued multi-community utility organizational models that enhance the management and operation of rural utilities, compared to the typical practice of each community managing and operating its own utilities. The following are multi-community utility organizational models researched and suggested for potential implementation:

Communities band together voluntarily
- Non-Profit/LLC Hybrid
- Cooperative (AVEC)
• Non-Profit/Co-op Hybrid (RUC)
• Statewide Association of Affiliates

Contract Services
• Contract Management (USA Inc.)

Government Service Area
• Borough or Service Area

For a complete description see Appendix B. “Models.”

Utility Management Best Practice Performance Indicators
In developing a multi-community utility organization, the organization will only be as good as the management practices it follows. The CRAS has adopted utility management “best practice performance indicators” that it feels are essential if utilities are to sustain their infrastructures. These “best practice performance indicators” are a combination of the Rural Utility Business Advisor (RUBA) Essential Indicators, Electrical Co-op management practices, and Bulk Fuel practices. The list of “best practice performance indicators” (Appendix C) is considered the minimum that a utility must adopt to successfully sustain its infrastructure.

These “best practice performance indicators” apply to all aspects of the utility and indicate each utility’s capacity to successfully provide for the following basic operating components:

• Governance
• Financial
• Management
• Operations

“Best practice performance indicators” should also be indicators to funding agencies that the agencies are achieving the following:

• Meeting their intended purpose of protecting public health through funding the development of rural community infrastructure
• Promoting economic growth potential
• Improving quality of life in rural Alaska

The CRAS believes that the long-term successful operation of utility systems is accomplished by utility organizations through the day-to-day implementation of
“best practice performance indicators.” Therefore, incentives promoting the use of these indicators will most effectively improve utilities.

Incentives are actions that can be taken by policy makers, funding agencies, and enforcement agencies that support and promote long-term, successful utility operation.

Incentives appropriate to utility operation, maintenance, and management result in desired behaviors that further a utility’s growth and capacity.
Sustainability Benchmarks

**Goal:** To coordinate agency investment benchmarks and provide communities that do not meet the Best Practice Performance Indicators with regional/cooperative support to obtain sustainability and receive infrastructure projects.

**Bulk Fuel, Power Plant, Water and Sewer, Solid Waste, Health Clinic Projects under consideration for funding by State or Federal Agencies**

Best Practice Performance Indicators are Reviewed by Agency

- **Yes:** Community meets Best Practice Performance Indicators
  - Agency approves project for construction
  - Community obtains capacity/skills to meet Best Practice Performance Indicators

- **No:** Community does not meet Best Practice Performance Indicators
  - Option #1: Community chooses to continue current practice and does not receive project
  - Option #2: Community joins or helps create regional organization that meets Best Practice Performance Indicators
  - Option #3: Community contracts with private entity (i.e., Utility Services of AK) to provide service/capacity
  - Option #4: Community starts a Utility Cooperative combining all utilities within the community and obtains skills to meet Best Practice Performance Indicators

**Financial Support** for community to obtain capacity, begin cooperatives/support existing cooperatives, or support private providers

- Agency approves project for construction
- Agency approves project for construction
- Agency approves project for construction
- Agency approves project for construction
Cooperatives in Rural Alaska Subcommittee Charter

Date: 5-22-03

Team Name: Cooperatives in Rural Alaska Subcommittee (CRAS)

Identify the Problem: The goal of rural Alaskan communities to achieve self-reliant and sustainable utilities is one that is shared by federal and state agencies. Historically communities and agencies have had differing ideas on how to best achieve that goal. The isolated locations, extreme climatic conditions and small populations found in most rural Alaskan communities create unique challenges requiring innovative solutions to achieve success. Today an opportunity exists to create alignment of process and purpose among the parties. There is a common interest in creating an environment to improve the operational efficiency of rural utilities as well as to create “best practice” models for establishing a subsidy program to assure that rural residents have equal access to safe and reliable utilities that protect the public health, provide opportunities for economic development, and enhance quality of life in rural Alaska.

Goal: Provide a recommendation to the Sustainable Utilities Steering Committee regarding utility services delivery models that are community driven, that enhance management and operational efficiency, consistency and regulatory compliance. Develop proposals to utilize these models in the establishment of a utility subsidy that assists in creating self-reliant and sustainable infrastructures in rural Alaska.

Team Members:

Roles and Responsibilities:

- Subcommittee Chairman: Steve Weaver, AK Native Tribal Health Cons.
- Subcommittee Members: Debbie Andrys, USDA Rural Development
  Jacqueline Agnew, Rural AK Sanitation Coalition
  Brad Ault, National Rural Water Association
  Ken Collison, AK DEC Village Safe Water
  Bill Gordon, USA Inc.
  Al Ewing, Denali Commission
- Krag Johnsen (Alternate), Denali Commission
- Meera Kohler, AK Village Electric Cooperative
- Frank Muncy, USDA Rural Development
Jim Stevens, AK Rural Development Council  
Scott Ruby, ADCED  
Staff Support: Ed Lohr, ANTHC

**Purpose Statement:** The subcommittee’s purpose is to:
- Identify and recommend utility management and operations organizational models that best support self-reliant and sustainable utility concepts; and
- Promote the establishment of a “best practices” subsidy for rural Alaska infrastructure.

**Scope:** The CRAS will identify and catalogue organizational models that enhance the management and operation of rural utilities, in comparison with the typical management practice of today of individual operation of each utility by each community. In addition the CRAS will develop strategies and options for integrating utility management “best practices” into subsidy proposals so as to enhance their potential for being funded and to optimize the impact of such funding on protecting the public health, promoting economic growth potential and improving quality of life in rural Alaska.

**Deliverables:** Phase I – Provide a summary report. Establish a written recommendation to the Sustainable Utilities Steering Committee on identifying organizational options and best practices for rural Alaskan communities considering alternatives to direct operation of their local utilities.

- Designate a lead person for each proposed Organizational Model.
  - Quantify Strengths and Weaknesses.
  - Revenue enhancement strategies.
  - Expense reduction strategies.
  - Services to be provided.
  - Organizational status of current entities in Alaska using this organizational model.
- Collate and prepare a summary report

Phase II –
- Develop a strategy for the implementation of selected model(s).
- Develop subsidy implementation and operation alternatives
Protocols: Identify the ground rules and operating procedures to be used:

Ground Rules (behavioral norms and expectations)
- One person speaks at a time
- Show respect for others’ ideas
- All Assignments delivered on due dates.

Operating procedures (guidelines for group meetings)
- Meetings will be held on Fridays 1:30-3:00 pm
- Outcomes and assignments documented.
- No alternates.
- Decision will be made by consensus.

Reporting and Record keeping: Staff support to keep meeting outcomes, assignments and collate report.

Timeline: Phase I - Weekly meetings with updates on progress, with final product due no later than June 10th 2003, at which time the subcommittee’s recommendation will be submitted to the Sustainable Utilities Steering Committee.

Phase II - Aug 1st to completion.
Non-Profit/LLC Hybrid

By Bill Schoephoester

Overview
Create a Non Profit Corporation for the operation and maintenance of bulk fuel plants that are owned by a Limited Liability Company (LLC). This model combines a nonprofit operating company (Rural Alaska Fuel Services, Inc. or RAFS) to manage multiple tank farms with the benefits of a LLC that owns bulk fuel storage facilities at a specific location. The LLC allows for multiple ownership interest with the liability protection of a corporation. The flexibility of the LLC allows for combining minimal corporate responsibilities with high protection from exposure to liabilities for members. The nonprofit operating company gives multiple communities the opportunity to gain economies of scale to spread superior management capability over multiple bulk fuel storage plants at lower cost.

Quantify Strengths and Weaknesses

Strengths:
- Economies of scale in operation and maintenance increase management capability and cost control by spreading overhead over multiple terminals
- Simplified ownership through LLC with management by Management Committee
- Management Committee composed of a representative from each class of member in the LLC elected by the members
- LLC contracts with nonprofit tank farm management company
- Nonprofit management company may be primary or secondary operator
- Nonprofit management company simplifies and standardizes operations across multiple facilities throughout the region
- Single point of contact for government and regulatory agencies for all participating communities
- Enhanced opportunity for local training and employment by the nonprofit management company to operate the local tank farms

Weaknesses:
- Acceptance of LLC ownership of tank farm by local community
- Requires critical number of communities to realize economies of scale
Revenue enhancement strategies
- Improved inventory control
- Strict invoicing and collections
- Pricing based on actual cost of nonprofit operation

Expense reduction strategies
- Employ economies of scale to spread management and operating costs over multiple communities
- Participating communities have the opportunity to purchase fuel collectively and possibly obtain a lower price

Services to be provided
SEE SUMMARY FOLLOWING THIS SECTION

A status of a current entity in Alaska using a similar organizational model

A RAAS model for successful management of a tank farm owned by multiple entities and managed by contract with a third party is the tank farm at the Ted Stevens Anchorage International Airport. Although they operate in a very different environment from rural Alaska communities, the success of the principles of the operation is a good model for rural Alaska.

Tom Mushovic, GM of ASIG, and Chuck Flynn, attorney for AFSC talked with the RAAS Steering Committee about the fueling operation at the Ted Stevens Anchorage International Airport. AFSC is a consortium of airline companies that owns fuel storage tanks, pipelines, and aircraft fueling hydrants at the Anchorage airport. ASIG is a service company that operates and maintains these facilities under a contract with the AFSC. Both companies are for-profit corporations; however, AFSC runs on a no-profit basis. AFSC has evolved over twenty years and faced many similar operational problems of multiple tanks, pipelines, etc. that were modified and improved over the last two decades and evolved into a modern, efficient operation. Chuck Flynn noted that the LLC was not an option when the airline consortium was form, otherwise it would have been the corporate form selected.
AFSC pays ASIG cost plus a fixed fee for operating and maintaining its fuel facilities. Cost is controlled through the budget process. The operator, ASIG, prepares the budget. The shareholders of AFSC approve the budget. Fees to cover the operating cost are collected from the users on the basis of a 90/10 formula. Ten percent is a fixed fee collected from each member, and 90 percent is collected in proportion to the volume of fuel lifted by each member.

Financial advantages stem from two things. First is the common tanks for all airlines which reduces cost. Second is the advantage of having storage capacity, which promotes competition among fuel sellers and reduces the cost of fuel. Tom and Chuck emphasized that having the storage was a vital factor in receiving competitive fuel prices.

One other advantage derives from financing major capital costs through a surcharge-assessed shareholder. The assessment is handled as a loan and is repaid to the assessed shareholders from future revenues. This saves substantial banking and finance costs.

AFSC will deliver fuel to qualified operators who are not members by holding an inventory of consigned fuel for delivery to non-members. Upon delivery to a non-member, ASIG bills for the delivery service and the fuel owner bills for the fuel. Similarly, RAFO could hold consigned fuel in inventory for delivery to non-member customers. The purchaser could pay RAFO for the delivery and pay the fuel owner for the fuel. Unless payment was received in advance, business would always be limited to qualified operators to protect the company from the liability of bad debt.
ATTACHMENT
SUMMARY OF SERVICES
Rural Alaska Fuel Service, Inc (RAFS)
[Fuel Terminal, LLC Management Company]

MANAGEMENT & ADMINISTRATION:
1) Oversee all affairs related to running the business of the corporation
2) Hire and supervise operating staff
3) Maintain all corporate records
4) Provide accounting and finance services
   a) Manage the corporate funds and LLC assets
      i) Renewal & replacement fund
      ii) Depreciation fund
      iii) Operation & maintenance fund
      iv) Bulk fuel purchase fund
   b) Analyze rate structures
   c) Financial forecasting
   d) Billing & collections
   e) Audits
5) Maintain insurance coverage
6) Prepare budgets
7) Purchase fuel
8) Prepare and maintain plans as required by state and federal regulatory agencies
9) Contract for spill response and for specialized services
10) Manage plant inventory
11) Liaison with government and regulatory agencies

PLANT OPERATIONS:
1) Arrange for and receive fuel deliveries
2) Dispense fuel
3) Provide training
   a) Hazwoper
   b) Spill response
   c) Plant operation & maintenance
4) Supervise & conduct plant maintenance
5) Purchase equipment and supplies
6) Inventory fuel
7) Test fuel
8) Drain secondary containment
9) Maintain plant security
10) Contract as secondary operator to communities operating their own plants

**PLANT MAINTENANCE:**
1) Test and inspect cargo pipelines
2) Test and inspect storage tanks
3) Inspect and service all valves
4) Inspect secondary containment
5) Clean storage tanks
6) Inspect and service marine headers
The Cooperative Model

Alaska Village Electric Cooperative
For the Cooperatives Subcommittee

May 15, 2003

Overview
Alaska Village Electric Cooperative (AVEC) was established in 1967 to provide central station electricity for a large number of unserved villages. The REA (now the RUS) worked with the local visionaries who incorporated AVEC to develop plans and build generation and distribution systems using low-interest borrowed funds. By 1971, some 46 villages were energized. AVEC now serves 51 villages whose populations are approximately 94% Native Alaskan. Non-fuel costs are captured through a postage-stamp rate system, while fuel costs are captured on a village-by-village basis. A seven-member board of directors elected from the villages served provides governance. The board has nearly always been made up of Alaskan Native members.

After struggling for more than 15 years with inadequate revenues, which forced low wages, high turnover, and much corner-cutting, establishment of the PCE system enabled AVEC to raise rates to a level where sustainability could be achieved. PCE provides about 25% of the gross revenue received by AVEC, with the other 75% (30 cents per kWh on average) coming out of the consumer's pocket. More than 50% of AVEC's sales are not eligible for PCE.

Strengths:
- In-house capabilities for all aspects of management, engineering, construction, operations
- Pride of membership that they are self-sustaining
- Revenues adequate to cover expenses (and generate modest margins)
- Ability to serve additional villages with modest staff additions
- Regular communications with members (monthly magazine)
- Excellent collection statistics (99.5%)

Weaknesses:
- Reliance on PCE for 25% of revenue. If $6,000,000 were to disappear, consumers would be hurting and AVEC could go into a death spiral
- Having to 'compete' with comparable villages where rates may be lower due
to not covering expenses such as engineering, construction, generator overhauls and replacement, depreciation, interest on debt, etc.
- Perception in some (member and non-member) communities that we are an 'external' entity due to lack of understanding of what co-ops are
- Vulnerable to loss of key loads, especially schools. Sadly, the greatest vulnerability arises from funding opportunities made available to communities, tribes, schools, etc. by federal and state agencies to install generation systems that bypass (and weaken) the serving utility and result in lower economies of scale and higher costs for all remaining consumers

Revenue Enhancement Strategies
Seek new member communities to improve economies of scale. Offer services for others looking to outsource (e.g., billing, collection services). Bring new loads on in served villages.

Expense Reduction Strategies
Constantly seeking to improve generating efficiencies (kWh sold per gallon of fuel burned). Standardize design of generation and distribution plant to reduce inventory and develop better construction and maintenance programs. Competitively bid the supply of major items such as poles, conductor, transformers and fuel. Identify promising local talent that could be trained to higher level of technical expertise, thereby reducing the need for Anchorage-based journeymen response.

Services to Be Provided
All services provided by an electric utility – billing, collection, service connects/disconnects, engineering for both generation and distribution, administration, accounting, construction of all types of utility plant, training and supervision of village operators, maintenance and replacement of utility plant.

Status of Current Entities in Alaska using this Organizational Model
The cooperative model is in wide use throughout Alaska. Examples are: Naknek Electric Association – serving Naknek, King Salmon and South Naknek, Tlingit Haida regional Electrical Authority (which is in the process of becoming a cooperative) – serving five communities in SE Alaska, Middle Kuskokwim Electric Cooperative – serving five small villages, INN Electric Cooperative – serving Illiamna, Nondalton and Newhalen and numerous larger cooperatives – Chugach Electric Cooperative, Golden Valley Electric Cooperative, Homer Electric Cooperative, Matanuska Electric Cooperative, Nushagak Electric Cooperative, Cordova Electric Cooperative, Kotzebue Electric Cooperative and a number of others.
Contract Management

Contract Management can provide cost effective services to assist Alaska's remote water/wastewater systems to achieve sustainability while retaining local ownership and control, assuring regulatory compliance and providing better service.

Introduction

Preserving local control (self-determination) while creating viable rural economic enterprises is a stated high priority for state and federal policy makers. They have also recognized the unique circumstances facing individual village many due to harsh environment, small populations and poor economic conditions. The contract management model for delivery of services to rural utilities provides options and flexibility for managers to deliver services to meet the needs of each village utility while fulfilling stated policy objectives.

Utilizing its expertise, large inventory of parts, and its certified operators, a private management company can quickly respond to both short and long term needs under a contract structure as determined by either the local owner, utility operator or, as necessary, the regulator. Developing viable economic enterprises in rural Alaska is a laudable goal. The contract management model preserves local ownership and allows village operators to determine which services it can hire locally while contracting for unmet needs to provide better service, protect the system and create efficiencies. Under contract management, village owners and government subsidizers pay only for services rendered as no new oversight agency is created with attendant overhead to be supported.

Model Description

In Alaska there are utility management companies that currently provide diverse services to a variety of large and small utilities. The contract model proposes that village systems, should they be provided the necessary resources, draw on these services for unmet local needs or to create efficiencies. Unlike models that may require villages to give up operational control or outright ownership, the contract management model promotes local accountability and retention of ownership while offering technical, financial and management assistance as needed to promote a viable local economic enterprise.

For decades Alaska's villages have been struggling to operate their own water and wastewater systems. Severely handicapped by the harsh arctic environment,
remote location, and lack of revenue, village operators have been forced to draw on scant and untimely grant resources and other sporadic government subsidies. Oftentimes, despite valiant effort, conditions have doomed them to inefficient operation, poor service, lack of regulatory compliance and ultimate frustration.

Should operational revenues be provided to them, village operators could assess local capability and contract for only needed services. As determined by each location’s circumstance, a contract could be issued for total management or single services, either short or long term. Immediate help for emergencies could also be contracted. As a utility develops a trained workforce, more sophisticated technology or backup systems, the village can take on more responsibility and terminate contracts. Villages, or the government subsidizers pay for no unused services under the contract management model as no new entities are created.

Incentives for efficiency
Any sustainability model must incorporate incentives for local managers to create system efficiencies and, at the same time, remove any existing disincentives.

When contracting services save village utilities operational costs, some savings should be retained by the utility. Perhaps allowing some savings to be set aside for future utility uses (like upgrades, expansion or other village services) would provide such incentives. Economically regulated utilities, whether publicly or privately owned, receive such incentives through rate of return.

Advantages
- Management companies already exist. No new entity needs to be created or supported by government resources.
- Most management companies are fully compliant with existing state and federal regulations, have certified operators and have proven track record for successful Alaskan operations.
- Contract management model promotes local ownership, promotes locally owned economic enterprise and respects diversity.
- Contract management model provides total flexibility. Short or long term contracts assure accountability and charge only for provided services not available locally or that prove to create efficiency or better service.
- There are many management companies with proven track records. Competition among them should keep costs down.
- Contracts provide the flexibility to respond quickly to emergencies by utiliza-
tion of existing inventories, personnel, and financial strength of the companies.

Disadvantages

- Political favoritism or nepotism in awarding of contracts may need to be controlled through a review process by subsidizing entity.

Examples of Current Contact Management Services

There are currently numerous companies providing contract services to water and wastewater utilities in Alaska. Besides accounting, bookkeeping and testing companies, there are a multitude of engineering firms providing full operational services to many small water companies throughout the state. Utility Services of Alaska is an example of a large management company that currently provides full service to six certificated utilities in interior Alaska.
Non-Profit/Co-op Hybrid

By Edward M. Lohr

Overview
The creation of the Regional Utility Cooperative (RUC) is a joint venture between the Alaska Native Tribal Health Consortium (ANTHC) and the Yukon Kuskokwim Health Corporation (YKHC). This model takes an established functioning Regional Health Corporation, which already supplies health care services to these communities and expands its services base to include the management of local utilities, at this time limited to water and wastewater. The RUC will hire all operators as employees of YKHC. The YKHC has established an operator pay scale and benefit package.

Quantify Strengths and Weaknesses

Strengths:
- Knowledgeable centralized management of 10 utilities. Reduced down time to customers, increase in public health.
- Economies of scale in purchasing of parts and supplies.
- Ownership of infrastructure remains with the community.
- Emergency response pool shared.
- Board already established.
- Standard pay scale and benefit package for operators, reducing operator turnover and increasing the knowledge base for plant preventative maintenance and operations.
- RUC monitors all construction activities with members, approving all plans and standardizing all components.
- RUC standardizes operation and management of all utilities.
- Billing and collection done from outside of community.
- Advisory Board of participating communities.
- Operator certification maybe covered by technical supervisor in Hub until operator obtains adequate certification.

Weaknesses:
- Regional Health Corporation with established indirect.
- Management in hub, operations in communities.
- Requires critical number of connections (500 estimated) to realize economies of scale.

**Revenue enhancement strategies**
- Outside billing and collection system, improves billing timeliness and collection efficiency and control i.e. Shutoffs.
- Increased efficiency in plant operations, to reduce electrical and fuel consumption.
- Sales of bottled water made on site with reverse osmosis system.
- Fee structure for tapping system for new housing, project administration fee, and other.

**Expense reduction strategies**
- ALISC reduces cost of parts and supplies, operator time looking for right part and/or vendor.
- Emergency spare parts and equipment on site to reduce down time, and reduce the chances of costly freeze-ups.
- Purchases and delivery of bulk items to reduce costs to utilities.
- Standardization of RUC parts to reduce specialized ordering, and reduce “on hand” inventory.

**Services to be provided**
The RUC will provide all services required to efficiently operate and maintain the communities that choose to join. These services include but are not limited to the following:
- Water Facilities Inventory.
  - Parts & Emergency Spare Parts Inventory
- Water Quality Monitoring Program.
  - Both Routine & Non Routine monitoring
  - Sampling plan
- Cross Connection Control Program.
- Operation and Maintenance Program.
  - Preventative Maintenance Program.
  - Routine maintenance scheduling.
- Leak Detection Program
- Component Assessment Program.
- Financial.
o Billing & Collection
o Budget preparation and oversight
o Maintain proper Insurance for all facilities
• Technical.
o Treatment process evaluation
o SNC list - Violations correction
o Standard details
o Standard construction procedures
o Training
• Managerial
  o RUC structure
  o WPO pay rate structure
  o WPO reporting
• Parts and supplies warehousing & expediting.
• Emergency assistance.

A status of a current entity in Alaska using a similar organizational model
To my knowledge there are no known examples similar to the RUC. Regional
Health Corporations have ventured off from their normal health care practices to
offer services to their customers.
Statewide Association of Affiliates

By Edward M. Lohr

Overview
The Alaska Native Tribal Health Consortium (ANTHC) through the Statewide Association provides support to Native Communities, Regional Health Corporations (RHC), and the Regional Utility Cooperative (RUC); this support consists of service provided in part by the Alaska Utility Supply Center (AUSC). ANTHC uses its local purchasing power to piggyback the procurement of parts and supplies for villages at discount prices. This cost savings is passed on to the utilities. The Association with the assistance of the Rural Utility Business Advisor (RUBA) program intends to standardize all ordinances, operating procedures, parts, supplies and other needs for utilities.

Quantify Strengths and Weaknesses

Strengths:
- Single point of contact for parts, supplies, utility problems.
- Reduced prices for parts and supplies.
- Standardization of parts and supplies to further reduce costs.
- Ability to warehouse bulk purchased items.
- Standardization of ordinances, documents and procedures.

Weaknesses:
- Association only staffed with 2 ANTHC employees and 1 Rural Community Assistance Corporation (RCAC) part time employee.

Revenue enhancement strategies
- Marketing to increase number of customers, currently at 135 communities and projects.
- Expand customer market.
- Internet ordering options.

Expense reduction strategies
- Standardization of parts to reduce specialized orders and limit inventory.
- Prime vendor contracts to guarantee quantities and prices.
Services to be provided
The AUSC offers any or all services to any member native community that requests them. Services available are:
- Sampling plans
- Rate studies
- CCR assistance
- Ordinances creation and adoption assistance
- Safety Assessments
- Vulnerability Assessments
- Contingency Plans
- Winterization Checks
- Final Inspection Checks
- Sample Documents
  - Notice to Disconnect
  - Final Notice
  - Procedure for Reconnection
  - Residential Service Agreement
  - Homeowner Agreement
  - Commercial Service Agreement
  - Right of Entry
  - Easement
- Assistance with RUBA Capacity Indicators

A status of a current entity in Alaska using a similar organizational model
There are other buying services that exist, expediters and such, but the Association requires a membership agreement, and tries to recoup the cost of the program through a surcharge fee.
Cooperative Organizational Options

In the discussions regarding the formation of cooperatives that will provide O&M functions to rural utilities, attention has been focused on three legal structures: Limited Liability Companies (LLC), and “S” and “C” Corporations. The expressed goal of CRAS is to develop an implementation strategy for potential cooperative members that will allow:

- Shielding of members from liabilities of other members, e.g. a fuel spill/poisoned well at one village will remain the liability of the utility owner
- Consolidated administration and maintenance functions to realize cost savings
- Receipt of federal O&M subsidies from USDA
- In the case of Tribally-held utilities, waiver of Sovereign Immunity

S-Corps are limited in the number and type of shareholders allowed; I believe that the maximum number of shareholders in an S-Corp is 15, and can only be individuals, not other Corps or entities, which eliminates this organizational structure from consideration.

Both C-Corps and LLCs offer protection from liability, allow for specific operational functions in their organic documents, and potentially qualify for federal operating subsidies. The entire key for both structures is the bylaws for C-Corps and Operating Agreements for LLCs. These documents both lay out what the Cooperative can and cannot do (assignment of roles and responsibilities), and indemnification from shareholder/member liabilities. Since both structures may organize as a non-profit, either would qualify under USDA rules.

The Waiver of Sovereign Immunity requires specific, deliberate acts by the Tribal Government to be enforceable. They must be done by resolution, memorialized within certified meeting records, and limited in scope to. Typically, USDA requires the issuance of an Opinion of Counsel regarding any such Waiver, and the use of Counsel helps ensure that the Waiver is limited to the involvement of the Tribe in the Cooperative.

C-Corps are more rigidly structured than LLCs in key areas of Cooperative membership. For instance, there exist thresholds whereby the number of shareholders corresponds with greater numbers of filings and reports to the State Division of
Banking and Securities. Also, it is anticipated that periodic admission of new members to any cooperative will occur over time. LLCs have greater flexibility in the issuance or transfer of membership "units" from either existing members, or Cooperative-held units.

During the implementation phase of Cooperative formation, it will be imperative that legal counsel be retained to develop the Operating Agreement to ensure that the above goals are incorporated.
Best Practice Performance Indicators

1. The utility has an annual budget based on historical costs.
2. All revenue and expenses for the utility are listed in the utility budget.
3. Monthly financial reports are prepared and submitted to the policy making body.
4. The utility is receiving revenues (user fees or other sources) sufficient to cover budgeted operating expenses.
5. The utility has adopted the necessary ordinances to enforce collections.
6. The utility bills customers according to the adopted ordinances.
7. An accounts receivable system is in place, which track customers, and reports past due accounts and amounts.
8. An accounts payable system is in place.
9. The payroll system correctly calculates payroll, payroll tax liabilities and keeps records.
10. A cash receipt system is in place that records incoming money and what it was for.
11. The Utility has a cash disbursement system that records how money was spent.
12. The utility is current on filing tax reports.
13. The utility is current on making tax deposits.
14. If there are any past tax liabilities, a repayment agreement has been signed and repayments are current.
15. The utility has a posted workers compensation insurance policy in effect.
16. The entity that owns the utility is known and the entity that will operate the utility is set.
17. The policy making body is active in policy making of the utility (meets as required by ordinance).
18. The policy making body enforces all adopted (written) utility ordinances and policies.
19. The utility has a manager/administrator who oversees the utility.
20. The utility has an operator(s) that is/are certified at the system level as determined by ADEC.
21. The utility has adopted the necessary ordinances (or rules and regulations) necessary to give it the authority to operate.
22. Training is made available for utility operator(s).
23. The utility is following a preventative maintenance plan developed for the existing facilities.
24. The utility has adopted and uses a Personnel Policy, which has been reviewed by an attorney, AML, or DCED.
25. The utility maintains a critical spare parts list.
ACKNOWLEDGEMENTS

Cover photo ©2006 Bill Hess.

STRENGTH IN NUMBERS: HOW TO FORM A RURAL UTILITY COOPERATIVE, 2nd EDITION was developed and written by John W. Spriggs, BS, MPH, with the help of: Steve Weaver, PE, DEE, Senior Director, Division of Environmental Health & Engineering, Alaska Native Tribal Health Consortium; Edward Lohr, PE, Department Manager, Tribal Utility Support, Alaska Native Tribal Health Consortium; Karl Powers, PE, Program Manager, Office of Environmental Health & Engineering, Yukon-Kuskokwim Health Corporation; Ken Duft, Professor & Extension Economist, Washington State University; Jacqueline Agnew, former Rural Alaska Sanitation Coalition (RASC) Coordinator; Kevin Braun, Communications Specialist, Alaska Native Tribal Health Consortium; Bill Harris, Regional Utility Cooperative Manager, Yukon-Kuskokwim Health Corporation; Scott Ruby, Local Government Specialist, State of Alaska Department of Community and Economic Development; and Michaela Straughn, Administrative Assistant, Tribal Utility Support, Alaska Native Tribal Health Consortium.

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