

# **San Joaquin Valley Water Flow Technology Cluster**

Initial Meeting

May 17, 2001

8 – 10 a.m.

Central Valley Business Incubator

2555 Clovis Avenue

Clovis, CA 93612

## **I. Welcome and Introductions**

Co-chairs Claude Laval, John Brewer, and Ray Dunn welcomed the participants. The co-chairs expressed their sense of encouragement based on the participation and input from the last meeting. Self-introductions were made.

## **II. Review of Meeting #1**

Kim Walesh complimented the participants for their work at the last meeting and the work completed by the Action Teams since the last meeting.

## **III. Action Team Presentations and Discussion**

The chair of each of the Action Teams presented the results of the group's activity. (Action Plan Worksheets attached)

### **A. Workforce Preparation Discussion - Bob Early, (Chair), Richard Meno, John Showalter, Russ Densmore.**

Bob Early reviewed the action plan worksheet developed by the committee (attached). Priority areas for action identified by the committee were:

- Developing a clear understanding between Cluster Members and educational institutions regarding Cluster needs and available educational offerings.
- Developing a cluster "scorecard" describing the breadth, depth, and quality of each educational institution's offerings of interest to the Cluster.
- Developing a cooperative effort between the Cluster and educational institutions to improve individual and overall educational offerings (For example: Cluster employees as instructors, Cluster offices/factories used as classrooms/labs, educational institutions develop new courses, etc.)

Specific action steps identified by the committee were:

- Determine the Cluster's workforce needs
- Determine and evaluate educational offerings

- Define “gaps” and develop programs to close the gaps. Possibilities to conduct the industry workforce and training program survey include cluster members, university students, a web-based survey, and/or utilizing other Fresno State resources (i.e. faculty).

Once the priority areas and potential action items were presented, the group provided feedback and made additional suggestions on the action plan worksheet, including:

- Cluster members should provide insight regarding growing occupations within the cluster.
- Ideas for funding the workforce survey:
  - The Central California Futures Institute has submitted a proposal to the Irvine Foundation to receive technical assistance to develop a “best practices” workforce preparation demonstration project for the cluster. A funding decision should be known by June 1. The program could include help in structuring the workforce survey.
  - The University Business Center can provide information on sources of funds, such as Workforce Investment Board and Employment Training Panel.
  - The Fresno County Economic Development Corporation will be undertaking a similar survey for other local employers and may be able to include the information requested by the cluster.
- In developing the workforce survey, the group needs to be careful to identify specific skills needed, not just categories of occupations (i.e. state specific standards for welding as opposed to simply stating that the cluster needs “welders”).
- The group articulated the need to offer training programs that operate independent of the school calendar.
- There is a need for an apprenticeship-type program.
- Amy Chubb from the University Business Center introduced the concept of using On-the-Job Training programs to supplement costs for training within the cluster. She explained that the UBC could manage those contracts for employers in the contract to lighten the burden of paperwork for the cluster companies.
- Claude Laval suggested that the cluster could help provide input into the Fresno State School of Engineering curriculum for mechanical engineering, as it is currently being revised.
- The group discussed the need for developing programs that service existing employees, as well as incoming employees.
- Another suggestion involved coordinating training among cluster members to share costs on training for similar machinery/equipment.
- There was an expressed need for extended education courses offered by the University in management for engineers and basic engineering training for managers.

- The cluster needs trained employees in marketing, sales, human relations, accounting, and finance in addition to the manufacturing skills.

The Workforce Preparation Committee will meet again in preparation for the next meeting to further define the action steps needed for the group to move forward. Specifically, the committee will discuss options for developing and circulating the needed workforce survey and cataloging existing training programs that service the industry. Amy Chubb (University Business Center), Candy Hansen (Fresno Training Institute), Allison Larsen (Fresno County Economic Development Corporation), and Cori Winn (Human Resources Manager at Netafim) will be asked to participate in the discussion.

**B. Technology Collaboration Discussion – Angelo Mazzei (Chair), Claude Laval, Ray Dunn, Nick Dvorak.**

Angelo Mazzei presented an overview of the action plan developed by the committee. The priority area identified by the committee was:

- Create a center of innovation and technology for the water flow and process technology cluster:
  - Center for Irrigation Technology at Fresno State to become Center for Water Flow and Process Technology to attract world interest in the industry;
  - Need for marketing;
  - Develop trade mission with other countries;
  - Develop in-bound, on-site visits

Additional ideas offered by the group included:

- Expand focus of center and cluster from water flow technology to water flow and process technology;
- Measurable outcome of the newly created Center for Water Technology would be sales;
- Such a center would help in the attraction of talent for the cluster;
- U.S. Department of Commerce and California Technology Trade and Commerce Agencies are available to help with trade missions;
- Within the next 6 months one in-bound trade mission should be scheduled to accomplish an “early win;”
- Tours of the water cluster for international visitors can be coordinated with the Tulare International Farm Show; and
- Representatives from Torro Ag and Rain for Rent. Angelo Mazzei will help recruit them.

The Technology Collaboration committee will meet again in preparation for the next cluster meeting. The objective of the meeting will be to scope out the Center for Water Technology and begin discussing first reverse trade mission.

**C. Industry Advocacy - John Brewer (Chair), Nick Dvorak, Sheila DeLany, Don Thompson, Amy Chubb**

John Brewer presented the action plan developed by the committee. Priority areas for action were:

- Quantifying the industry, as measured by collective total sales, wages, purchase locally, regionally and statewide, capital investment and the implication of conservation products, for example.
- Identifying the resources that may be brought to bear to support industry initiative, such as business services and workforce education.

The group provided the following additional ideas for the committee:

- Overall goal of this committee is to expand the cluster through an improved business climate. Quantifying the value of the industry will help give the leverage necessary to improve the climate.
- Need increased marketing and exposure. Collateral materials need to be developed. The University is developing a cluster web site as part of its current grant program. Brochures also need to be developed based on the information developed in the industry survey.
- Focus on uniqueness of the San Joaquin Valley industry so water technology clusters in other parts of the world won't be able to easily replicate the model.
- Explore SBIR (Small Business Innovation Research) grants for help with funding research and development in the industry. SBIR grants can be matched with state CalTIP grants up to \$250,000. University Business Center will e-mail web sites to cluster members that provide more information on government R&D grants.
- Survey for cluster members needs to be developed to anonymously aggregate information on their U.S. and international sales. Survey also needs to measure the value of technology within the cluster (i.e. numbers of patents, employees in technical fields).
- The goal for the next committee is to develop the questions that need to be on the survey.
- Coordinate with international agricenter
- Additional members to be added to the committee: David Zoldoske, representatives from Torro Ag and Rain for Rent.

**IV. Wrap-Up/Next Steps**

Kim Walesh thanked everyone for their efforts. She indicated that the cluster is making big strides and is looking forward to the next meeting.

The next meeting of the Water Cluster will be on June 13, 2001 at the Central Valley Business Incubator from **9:00 a.m. – 11:00 a.m. (Note time change)**.

It was mentioned that the cluster should broaden its scope. Rather than focus

only on the Central Valley, it was suggested that the central coast be included. Claude Laval indicated he would assist in making the contacts.

***Specific items for follow up are:***

- Each committee will meet again before the June 13<sup>th</sup> meeting.
- Workforce Preparation committee will begin to develop list of information needed to assess the workforce preparation needs of the cluster.
- Technology Collaboration committee will begin to scope out the new center and discuss next steps for the first in-bound trade mission.
- Advocacy Committee will develop list of information needed determine the size and scope of the industry.
- Angelo Mazzei and Claude Laval offered to make introductions to additional companies that need to be added to the cluster.
- Amy Chubb will provide information to the cluster on government R&D grants.
- Ashley Swearengin will collect information on the Gateway Cities Partnership (a welding training program) and organization that does outreach to women to recruit them into manufacturing careers.

**IV. Introduction of CALIFT Program at Fresno State.**

Dan Clawson explained the CALIFT (California Irrigation and Flow Technologies) Export Program and provided brochures. This program is designed to promote irrigation/flow technology through increased export sales from the San Joaquin Valley manufacturers to Argentina, Chile, and Mexico and by providing educational opportunities for the cluster in export and e-business practices.. The Fresno County Workforce Investment Board and the California State University Agricultural Research Initiative fund the program.

**V. Adjournment.**

The meeting was adjourned at 10:00 a.m.

# San Joaquin Valley Water Flow Technology Cluster

## Action Plan Worksheet

**Committee:** Workforce Preparation  
**Meeting Date:** 5/14/01  
**Attendees:** Bob Early (chair), Sherri Abercrombie (HR, Grundfos), Denise Stelling (HR, Fresno Valves and Casting), Russ Densmore, Richard Meno, John Showalter, Ashley Swearengin

**Long Term Goal(s):** (A) Develop industry/education alliances to develop educational and training programs that meet the skill requirements of cluster companies; and (B) Promote employment opportunities in manufacturing (especially in the Water Cluster).

### Why Important/Rationale for Action:

*Goal A will result in:*

- A consistent stream of enough qualified candidates;
- Less turnover;
- Higher quality products and decreased costs (scrap, reduced on-the-job training costs due to more capable workers, etc.); and
- Benefits to both the Cluster and the educational partners.

*Goal B will result in:*

- A skilled and experienced labor pool;
- “Attraction” of other manufacturing companies to the region;
- Increased demand for educational and training opportunities;
- Less movement of employees; and
- An improved image of manufacturing as a career.

### Focus of Action:

**Goal A:** Development of an ongoing organization that coordinates educational and training programs between the Cluster and educational institutions. The organization would need to be flexible and evolving to keep up with changes in the industry’s needs.

**Goal B:** Development of an organized effort to promote manufacturing as a desirable career to high school, community college, and university students, guidance counselors, and faculty.

**Specific Measurable Outcomes** (Clear, Compelling, Outcome-Oriented, Achievable Within Two Years):

**Goal A:**

- *Clear understanding between Cluster Members and educational institutions regarding Cluster needs and available educational offerings.*
- *Cluster "scorecard" describing the breadth, depth, and quality of each educational institution’s offerings of interest to the Cluster.*
- *Cooperative effort between the Cluster and educational institutions to improve individual and overall educational offerings (For example:*

*Cluster employees as instructors, Cluster offices/factories used as classrooms/labs, educational institutions develop new courses, etc.)*

**Goal B:** *Increase in enrollment, especially female, in Cluster “recognized” educational programs*

**Steps to Achieve Measurable Outcomes (Who Does What By When):**

*Goal A: Determine Cluster’s workforce needs, determine and evaluate educational offerings, and define “gaps.” Possibilities include cluster members, university students, a web-based survey, and/or utilizing other Fresno State resources (i.e. faculty).*

*Goal B: Determine and evaluate existing opportunities for promotion manufacturing careers at educational institutions. Determine an effective overall program (multi-step) to encourage enrollment in manufacturing related courses.*

**Implementation Requirements (Resources, Relationships, Expertise, Support):**

- Key partners include community colleges, private and public universities, high schools, training centers, workforce investment boards, and unions

**Champions** (for first-year implementation):

- Cluster members, especially workforce committee
- Human resource managers within Cluster companies

**“Early Wins”** (initial signs of progress, commitment):

- Funds and expertise secured to conduct the surveys
- Cluster member workforce “needs” identified and agreed upon
- “Inventory” of existing educational offerings completed and tabulated
- “Inventory of educational institutions presenting opportunities for “promoting” manufacturing as a career
- Outline of multi-step, manufacturing, promotional program at educational institutions

# San Joaquin Valley Water Flow Technology Cluster

## Action Plan Worksheet

**Committee:** Technology Collaboration  
**Meeting Date:** 5/11/01  
**Attendees:** Angelo Mazzei (chair), Claude Laval, Don Thompson, Dan Clawson, Ashley Swearingin

**Long Term Goal:** To advance San Joaquin Valley water flow technology by raising its profile with worldwide audiences.

**Why Important/Rationale for Action:** Advancing San Joaquin Valley water flow technology will (1) help regions around the world manage water shortage issues; (2) create more, diversify jobs for the regional economy; (3) help retain existing jobs as cluster companies broaden their focus to include other applications for their technology.

**Focus of Action:** Broaden Fresno State's Center for Irrigation Technology" to the "Center for Water Technology," which would include agricultural, municipal, and industrial divisions. The new organization would expand its mission to include (1) "inbound" best practices demonstrations, (2) "outbound" best practices demonstrations, i.e. reverse trade missions with major potential clients, and (3) R&D for new product development. The vision is to build the Center to become the world leader for water flow technology.

**Specific Measurable Outcomes** (Clear, Compelling, Outcome-Oriented, Achievable Within Two Years):

- Launch the newly reorganized Center
- Build the demonstration unit(s)
- Plan and implement 2 to 3 successful reverse trade missions

**Steps to Achieve Measurable Outcomes** (Who Does What By When):

- Develop business plan for CWT, including mission, scope of services and projects, staffing plan, list of key industry partners, operational plan, and budget – Dan Clawson and David Zoldoske
- Begin grant research for potential funding sources – Amy Chubb, Dan Clawson, David Zoldoske, CSUF Foundation
- Meet with appropriate University personnel, present business plan, and gain approval – Claude Laval, Don Thompson, Angelo Mazzei, David Zoldoske, Dan Clawson

**Implementation Requirements** (Resources, Relationships, Expertise, Support):

- Budget to be determined in business plan
- Physical requirements to be addressed by CIT staff and University president/provost
- Relationships with key industry associations such as American Water Works Association, Irrigation Association
- Other partners: county economic development corporations, multiple colleges on campus at Fresno State,

- Expertise – needs to be imported from the cluster companies to the University and vice versa

**Champions** (for first-year implementation):

- Technology Collaboration Committee (Angelo Mazzei, Claude Laval, Don Thompson, Nick Dvorack) and any/all other cluster companies that are interested

**“Early Wins”** (initial signs of progress, commitment):

- Business plan approved by University president/provost and supported by cluster companies
- “Organizational” issues resolved at University
- Fund raising strategy in place (based on budget developed in business plan; could include membership services similar to Holland University program mentioned by Claude Laval)

## **ACTION PLAN WORKSHEET**

### **LONG-TERM GOAL:**

Quantify, define and harness power of irrigation industry to influence policy, legislation and allocation of resources benefiting the industry.

### **WHY IMPORTANT/RATIONALE FOR ACTION:**

The multi-billion dollar irrigation industry is not recognized for its collective impact on the region, state and nation. The industry needs to articulate and define its intrinsic value and use that information to influence a variety of issues ranging from workforce development to legislation. Focus should be a “ground up” approach, starting with city officials, then key state and national representatives.

### **FOCUS OF ACTION:**

1. Quantifying the industry, as measured by collective total sales, wages, purchase locally, regionally and statewide, capital investment and the implication of conservation products, for example.
2. Identifying the resources that may be brought to bear to support industry initiative, such as business services and workforce education.

### **SPECIFIC MEASURABLE OUTCOMES (Clear, Compelling, Outcome-Oriented, Achievable Within Two Years):**

1. Substantially increase the visibility of the industry through documentation, development of industry-specific collateral materials (web site and brochures) and commitment of additional resources.
2. Increase the influence of the industry by educating political leaders at the city and state levels on its impact.
3. Increase the number of critically needed workers (e.g., machinists) by identifying skill sets, then developing and implementing an industry-specific workforce education programs.
4. Increase sales revenues through industry collaboration and accessing available business resources

### **STEPS TO ACHIEVE MEASURABLE OUTCOMES (Who Does What By When):**

- Research, documentation of industry – Dan Clawson by August 2001
- Development of targeted officials – Fall 2001
- Development of industry-specific collateral materials (web site and brochures) – Industry, University Business Center, Center for Irrigation Technology – basic web prototype by June 30; build-out of site by Fall 2001
- Identification of skill sets and workforce education program – spring 2002

IMPLEMENTATION REQUIREMENTS (Resources, Relationships, Expertise,  
Support):

Implementation will require investment of time and resources in all identified areas. The partnership between the industry and the university provides for resources, (for the time being) relationships, expertise and support. The initiative, however, requires the buy-in of the irrigation industry to advance and grow its influence.

CHAMPIONS (for first-year implementation):

- Partnership among and between the industry, university and Great Valley Center.

“EARLY WINS” (initial signs of progress, commitment):

1. Documentation of industry power and subsequent development of political list and collateral materials
2. Customized workforce education package
3. Becoming a highly recognizable organization with sufficient resources to continue progress.

- submitted by:           John Brewer, CMB Industries  
                                  Sheila DeLaney, Netafim USA  
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                                  May 9, 2001