

CALIFORNIA POLYTECHNIC STATE UNIVERSITY
San Luis Obispo, California 93407
ACADEMIC SENATE

FILE COPY

Academic Senate
Executive Committee Agenda
April 23, 1991
UU 220 3:00-5:00 p.m.

<u>Member</u>	<u>Dept</u>	<u>Member</u>	<u>Dept</u>
Acord, Pat	PE/RA	Pokorny, Cornel	CompSci
Ahern, James	Agribus	Reynoso, Wendy	FinAid
Andrews, Charles	Acctg	Russell, Craig	Music
Botwin, Michael	ArchEngr	Terry, Raymond	Math
Gamble, Lynne (Secty)	Library	Vilkitis, James	NRM
Gooden, Reginald	PoliSci		
Kersten, Timothy	Econ		
Koob, Robert	VPAA		
Moustafa, Safwat (VC)	MechEngr	Copies: Warren Baker	
Murphy, James (C)	IndTech	Glenn Irvin	
		Howard West	

I. Minutes: Approval of the April 2 and April 9, 1991 Academic Senate Executive Committee minutes (pp. 2-6).

II. Communication(s) and Announcement(s):

III. Reports:

- A. Academic Senate Chair
- B. President's Office
- C. Vice President for Academic Affairs' Office
- D. Statewide Senators

IV. Consent Agenda:

V. Business Item(s):

A. Academic Senate vacancies:

Academic Senate

SLA - replacement for Torres, '91-92 DOUGLAS KEESEY (English)

Academic Senate committees:

SLA - Curriculum Committee (replacement for Simon), '90-91 term

SPS - Instruction Committee (replacement for Acord), '90-91

SSM - Const & Bylaws Committee (replacement for Wight), '90-91 term

Academic Senate Distinguished Teaching Awards Committee

One vacancy (replacement for Ruggles), '90-91 term

Foundation Board of Directors

One vacancy - LEON MAKSOUDIAN

GE&B Area "E" Subcommittee

One vacancy plus an alternate

university-wide committees:

University Union Executive Committee - one vacancy (replacement for Dobson)

University Union Advisory Board - two vacancies

ON COURSE Work Group - one vacancy

B. Resolution on the Academic Calendar-Terry, Chair of the Instruction Committee (p. 7).

C. Resolution on Job Announcement Recommendation-Torres, Professor (pp. 8-9).

D. Resolution on U.S. Ethnic Pluralism Program-Torres, Chair of the U.S. Ethnic Pluralism Development Committee (pp. 10-11).

E. Resolution on Proposal to Establish the Agricultural Safety Institute at Ca Pol-Dilger, Professor (pp. 12-27).

F. General Education and Breadth Proposals-Burgunder, Chair of the GE&B Committee (pp. 28-134).

G. Curriculum Proposals-Bailey, Chair of the Curriculum Committee (pp. 135-145).

*minutes of
4-2-91 and
4-9-91 were
removed*

*pp. 28-134
not scanned
pp. 135-145
not scanned*

VI. Discussion:

- A. Membership of General Faculty to the Academic Senate-DeMers, Chair of the Constitution and Bylaws Committee (p. 146).
- B. Should the Academic Senate Executive Committee be involved in school dean search efforts?

VII. Adjournment:

ACADEMIC SENATE
CALIFORNIA POLYTECHNIC STATE UNIVERSITY
San Luis Obispo, California 93407

Background: At present the University is operating on an approved Academic Calendar extending through the end of 1992. Forthcoming catalog deadlines make it timely to begin campus-wide consultation on the calendar for the next catalog issue, 1992-1994. In accordance with CAM 481 the Vice President for Academic Affairs has proposed a calendar to the President for approval following appropriate consultation including the Academic Deans' Council, Academic Senate, Student Senate, Student Affairs Council, Foundation, and Dean of Students.

RESOLUTION ON THE ACADEMIC CALENDAR

- Whereas, Review of proposed academic calendars is a routine matter which need not come before the Academic Senate as a whole; and
- Whereas, The Instruction Committee of the Academic Senate is the committee which has been designated to review proposed academic calendars in the past; and
- Whereas, The Instruction Committee has sometimes communicated its approval of academic calendars to the Vice President for Academic Affairs via the Senate Office and on other occasions has prepared an appropriate resolution for approval /disapproval by the Senate; and
- Whereas, The deadline for resolutions to be submitted to the Academic Senate was April 16, 1991; and
- Whereas, The Instruction Committee began its detailed review of the proposed calendars for 1992-1995 on April 18, 1991; therefore, be it
- Resolved, That the Instruction Committee will make its recommendations to the Vice President for Academic Affairs on the attached calendar proposals in a memo via the Academic Senate Office, prior to May 10, 1991; and be it further
- Resolved, That the Instruction Committee will, henceforth, make its recommendations to the Vice President for Academic Affairs concerning calendar proposals in a memo sent to the Vice President via the Academic Senate Office prior to the appropriate deadline.

ACADEMIC SENATE
of
CALIFORNIA POLYTECHNIC STATE UNIVERSITY
San Luis Obispo, California

Background Statement:

Cal Poly has recently redoubled its efforts to attract increasing numbers of ethnic minority and female students, and it is in many respects succeeding in such efforts. However, additional innovative methods must be developed to also attract applications from ethnic minorities and females for employment in all categories at Cal Poly.

Such efforts at recruitment in the recent past, while sincere, have met unfortunately with only limited success. For example, in responding to Cal Poly's statement on Affirmative Action in its Self-Study Accreditation Report, the 1989--1990 WASC Visiting Accrediting Team said, "Cal Poly seems stifled in its efforts to achieve success in recruitment and retention of minority and female faculty members. For example, in 1974 Cal Poly had at least six black, female faculty members. Today it has none" (S1-17). It also appears that the number of Chicano professors will drop from ten in 1989 to perhaps as low as six in Fall, 1991. Similar considerations of the need to attract and retain women of any ethnic or racial background are paramount to provide for an educational environment conducive to academic success for both male and female students and students of a variety of ethnic and racial backgrounds.

AS- _____

RESOLUTION ON

Job Announcement Recommendation

WHEREAS, Cal Poly has in the recent past had some difficulty in attracting applications for employment from ethnic minorities and women; and

WHEREAS; It is beneficial to diversify our work force regarding the ethnic and gender backgrounds of our employees; and

WHEREAS; Ethnic minorities and women in our job force would be in a position to assist Cal Poly in its affirmative action efforts of recruiting and retaining ethnic minority and women students; and

WHEREAS; The job announcement for positions is a major vehicle to attract applications from ethnic minorities and women; therefore, be it

RESOLVED, That the Academic Senate recommend to the Director of Personnel and/or other appropriate University personnel the inclusion of the following statement as part of the required or desired qualifications for all future job announcements at Cal Poly for support staff, faculty, and administrative positions:

"Demonstrated interest in and involvement with issues related to women students and students from ethnic minority backgrounds";

and be it further

RESOLVED: That the Academic Senate recommend independently to all departments the inclusion of such a statement as either a required or desired qualification in their future job announcements for faculty positions.

Proposed By:
Prof. Luis A. Torres, English, and
The Center for Women and Ethnic Issues
Dr. Willi Coleman, Director

April 17, 1991

ACADEMIC SENATE
of
CALIFORNIA POLYTECHNIC STATE UNIVERSITY
San Luis Obispo, California

Background Statement:

The challenge facing our educational system is to provide an environment which encourages students of all backgrounds to fully develop their intellectual ability and prepare them to live productively in a multicultural society. Such an environment requires academic programs and services that give consideration to the multicultural heritage of the student population and of society as a whole.

The success of our multicultural society hinges on the productive interaction between people of different cultures, life styles, and views. Our educational system should be a catalyst for this interaction. Our state universities should create an environment in which every student--regardless of race or ethnic origin--is educated with respect to the cultural pluralism of our society. Cal Poly's academic programs should increasingly reflect this goal. The development of a U.S. Ethnic Pluralism program will promote this University objective.

AS-_____

RESOLUTION ON

U.S. Ethnic Pluralism Program

WHEREAS, The U.S. Ethnic Pluralism program would introduce a significant and relatively new discipline to our curriculum; and

WHEREAS, Such a program would promote an enhanced understanding of ethnic cultures and traditions especially in relation to their interaction with those of the dominant culture; and

WHEREAS, Such a program would develop an appreciation for the contributions of ethnic communities; and

WHEREAS, This program would foster an analysis of the significant issues and problems facing ethnic communities; and

WHEREAS, It is imperative that all Cal Poly students develop the understanding required to live and work productively and responsibly in California's and the nation's increasingly multicultural society; therefore, be it

RESOLVED: That the Senate endorses the development of a U.S. Ethnic Pluralism program which would advance instruction

about and enhance knowledge of the non-dominant American cultures of Native Americans, African Americans, Chicanos/Latinos, and Asian Americans; and be it further

RESOLVED: That this program would institute a course requirement for graduation which would not necessitate any additional unit requirements for graduation; and be it further

RESOLVED: That this program would offer a variety of courses from which students could choose, such courses dealing with one or more of the ethnic groups, and such courses being approved by a program committee; and be it further

RESOLVED: That as part of its design this program would also institute a minor in U.S. Ethnic Pluralism; and be it further

RESOLVED: That this program would as part of its integral purpose emphasize gender issues within the ethnic minority communities; and be it further

RESOLVED: That the Academic Senate will appoint as an Academic Senate ongoing, standing committee a "U.S. Ethnic Pluralism Development Committee" preferably by the end of Spring quarter, 1991, to further delineate the specific direction of this U.S. Ethnic Pluralism program and to report back to the Senate with its programmatic proposal by the end of Fall, 1991.

Proposed By:

The U.S. Ethnic Pluralism Development Committee.

Chair: Prof. Luis Torres, English.

April 17, 1991

Adopted: _____

**ACADEMIC SENATE
OF
CALIFORNIA POLYTECHNIC STATE UNIVERSITY
San Luis Obispo, California**

Background Statement:

Major problems exist in agricultural safety education because there is no agricultural safety center in the United States whose primary scope is the training and distributing educational materials in farm safety. The majority of information available is outdated. What is available does not address safety problems unique to the California agricultural environment.

Agriculture is the most hazardous area of employment in the state of California. Although accidents in the industry cost employers and insurance carriers millions of dollars yearly in premiums and claims, the public is largely unaware of the seriousness of the problem.

California law SB 198 requires all employers, including the agricultural industry and California Colleges and Universities, to have a safety program in effect by July 1, 1991. Information in safety training necessary to establish the required safety programs and train agricultural employees, 4H personnel, agriculture teachers and others in farm safety is largely unavailable.

Industry has encouraged the School of Agriculture to expand its activities in agricultural safety education. The creation of the Agricultural Safety Institute will fill both a state and national need as a source of information and training in agricultural safety.

AS-____-86/____

RESOLUTION ON

The Proposal to Establish the
Agricultural Safety Institute
at
California Polytechnic State University
San Luis Obispo

WHEREAS, Agricultural is the most hazardous industry in California; and

WHEREAS, injuries cost the agricultural industry millions of dollars annually; and

WHEREAS, effective hands-on training in agricultural safety can reduce or eliminate injuries; and

WHEREAS, no facility or up-to-date training materials exist in the United States; therefore, be it

RESOLVED: That a privately funded Agricultural Safety Institute be established at California Polytechnic State University as recommended in the attached Proposal.

Proposed By:

Paul Dilger,
Associate Professor
Agricultural Engineering

On: April 16, 1991

PROPOSAL
TO ESTABLISH THE

Agricultural Safety Institute at California
Polytechnic State University, San Luis Obispo

Submitted By

Paul Dilger, Lecturer
Agricultural Engineering
California Polytechnic State University
San Luis Obispo, CA 93407
Telephone (805) 756-2378/2384

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ABSTRACT

Today major problems exist in agricultural safety education because there is no state of national agricultural safety center whose primary scope is training and distribution of educational materials in farm safety. Materials developed by industry and extension services are limited. The majority of the information available is dated or not uniquely related to the California agricultural environment.

The primary goal of the Cal Poly Agricultural Safety Institute is to further education in farm safety through the development of safety programs, training materials and workshops for the agricultural industry. These activities will be carried out by the School of Agriculture faculty and staff in close cooperation with and funded by production and support agriculturalists.

Through effective hands-on training, risks can be reduced or eliminated making agriculture a safer place to work. Industry has encouraged the School of Agriculture to expand its activities in safety education. The Agricultural Safety Institute will provide a permanent facility for teaching agricultural safety training to a variety of groups from the local to the national level.

The Agricultural Safety Institute will provide a privately funded facility dedicated to developing agricultural safety materials and conducting training in all areas of farm safety. Workshops developed by Cal Poly farm safety staff will be offered to those involved in the agricultural industry.

A Research center will be included as part of the Institute. Written, audio and visual agricultural safety training materials developed at Cal Poly will be available for workshops and on a sale or rental basis from the resource center.

**Agricultural Safety Institute
at the California Polytechnic State University,
San Luis Obispo**

1. Background

The largest industry in the United States is agriculture. Agricultural employees form the nation's largest work force. Although some of the nation's most hazardous occupations are in agriculture, particularly agriculture in California, there is no established agricultural safety center having the primary responsibility to provide hands-on instruction in agricultural safety at the field level.

Agriculture is the most hazardous area of employment in the state of California. Although accidents in the industry cost employers and insurance carriers millions of dollars each year in premiums and claims, the public is largely unaware of the seriousness of the problem.

Safety programs are often cut early in budget reduction situations. Government funding for safety education, safety programs and educational materials has been severely limited. However, new legislation mandates employers provide safety training for everyone who may encounter safety hazards in their work. Large fines will be levied against all who don't comply with the new safety training regulation.

Historically manufacturers of agricultural equipment and supplies do everything within their power to protect the user. Over time however, users remove protective shields, warning labels are lost or covered with grime, and components malfunction because of poor or no maintenance.

Agricultural safety consultants from workman's compensation insurance companies can talk one-on-one with the agriculturalist in an attempt to remove or reduce areas of risk. However, these talks cannot efficiently reach sufficient numbers of people to significantly reduce these risks. In addition, only a fraction of the agents have the background necessary to be competent in safety training.

Presently agricultural industry, agricultural teachers, farmers and ranchers have only one central source of up-to-date teaching materials and safety hand-outs. This source is located in Canada and is not prepared to provide personal help for agriculturalists in the United States. Although these materials are

professionally prepared, they do not specifically address California's farm and labor problems.

Current agricultural teacher training programs omit agriculture safety training classes due to the lack of up-to-date materials and a shortage of instructors with a background in safety. This lack of safety instruction increases yearly as university instructors are pressed to add new academic materials to classroom and laboratory activities.

California Polytechnic State University, San Luis Obispo (Cal Poly) has the largest staff of Agricultural Engineers in the United States experienced in farm safety and human factors education. The School of Agriculture has a national reputation for excellence with hands-on training as a result of faculty on-farm experience.

The agricultural safety staff at Cal Poly has organized and conducted training seminars and workshops for industry. Insurance companies in the agricultural compensation field have stated that the Cal Poly program is the most informative and useful program available. Letters in Appendix A document this statement.

Industry is eager to assist in funding this effort to create a permanent expanded facility for Farm Safety education. Cal Poly was approached by private industry January 1991 about financial aid for the construction of a Farm Safety Institute at Cal Poly. To guarantee this funding, campus approval must be in progress by June 1, 1991. Additional financial backing from industry is expected to be extended to Cal Poly at a meeting of Agricultural Industry members to be held May 17.

2. Objectives:

The establishment of an Agricultural Safety Institute at Cal Poly will provide educational safety awareness and accident prevention programs through a variety of resources. The Institute will enable the following objectives:

- o Prepare written learning materials for classroom distribution and available for loan or purchase from the Institute resource center.
- o Prepare audio/visual training materials in all aspects of agricultural safety in English, Spanish and other languages based on need and available funding.
- o Conduct training workshops for off-campus groups such as agricultural safety consultants, 4-H leaders,

farm and ranch foremen, high school agricultural teachers and their classes and farm families.

- o Provide health and safety consultants and trainers hands-on workshops, conferences and short courses tailored to meet specific needs.
- o Prepare agriculture consultants for comprehensive safety analysis to reduce job risks and provide information to assist in the removal of risk factors in agricultural jobs.
- o Develop mobile resource units especially designed and equipped for field training.
- o Provide assistance in the design and development of health and safety decals and posters.
- o Write and distribute articles for publication in agricultural journals.
- o Serve as a national clearinghouse on farm safety for agricultural safety professionals and industry.
- o Provide a facility for Cal Poly faculty, staff and student training.

3. Work Plan

A. Construction/Modification of Site.

The Cal Poly campus is central to all agricultural activities in California. The old Parker Barn location on campus has been selected as the suggested location for the Farm Safety Institute. Its location will foster cooperation with all departments in the School of Agriculture. The structure is currently being used as hay storage.

The current plan will significantly increase the use of this land for farm machinery instruction. Room will be available for the development of new classes. Instruction in safety can also be integrated into existing classes.

Planned construction and renovation would provide a classroom, library, video studio and offices. Existing outside structures will provide housing for machinery and training materials.

Although extensive renovation will be needed to utilize the facility, the location provides a great potential for industry support. The aesthetic value of the location will attract great attention from potential funding sources. A preliminary plot plan and building floor plan is attached as Appendix B.

Funding for the construction of the Farm Safety Institute will be provided private industry and a variety of other private sources.

B. Coursework Development.

Coursework will be developed at Cal Poly using a team effort approach. Resulting coursework will include but not be limited to pamphlets, hand-outs and video productions.

Courses funded by industry will be developed by the Cal Poly farm safety staff with consideration given to meeting industry needs.

C. Class Development and Scheduling.

The Dean of the School of Agriculture with farm safety staff will determine the priority of use for the facility. In-house Cal Poly training will be open ended to staff and students for their research and development.

Workshop scheduling will be determined by agricultural seasons and staff availability. Classes of one, two or three days duration will be scheduled weekly throughout the twelve month year.

Average workshop size will be 20 students. Special classes can be customized to meet industry and company needs.

Selected instructors will be combined with farm safety staff to create team teaching. Instructors will be selected on the basis of national excellence in the field of farm safety through professional involvement.

D. Library/Archive Development.

The learning center/reference library to be developed and established as part of this project will also allow individual training through written information, audio and video tutorial packages and staff assistance.

Cal Poly has established an on campus database of farm safety information from the American Society of Agricultural Engineers. Cal Poly will continue to develop an international database including links to the Advanced Technology Information Network (ATI-NET) and the Canadian Agricultural Safety Center information base.

The library resource center will also be developed through the collection of materials available yearly from Extension Services and other sources.

E. Resource Materials Development.

Since most available material on Farm Safety is dated, Cal Poly will develop new and updated resource material. Needed safety materials will be researched and written by Cal Poly staff.

Additional material may be co-developed with industry and other agencies. Contact has been made to establish a working relationship with the Canadian farm safety agency to produce current documents on safety.

Safety materials developed through the Farm Safety Institute will be made available to the public directly from the Institute resource center and through the Cal Poly Foundation's Vocational Education Productions (VEP) Catalog.

To adequately train California's multi-lingual farm employees and to satisfy the expected international demand for farm safety training, some videos will be dubbed in foreign languages.

4. Benefits

1. Farmers, ranchers and agriculturalists will receive help to reduce injury.
2. Programs will be available to meet state compliance standards.
3. An up-to-date study library for teachers, students, safety specialists and other individuals containing a collection of safety materials generated both locally and nationally will be established.
4. International computer databases of safety materials will be accessible to specialists

and researchers working to solve agricultural safety problems.

5. Cal Poly faculty and staff will be provided with a facility to develop lessons and teaching aids in safety and methods to integrate these lessons into their existing classes. Resource information developed will be available for all agricultural disciplines.
6. A resource center will be available for senior project development and other student study activities involving health and human factors.
7. Students will receive an additional competitive edge by possessing a high level of safety information and resources.

5. Institutional Resources

Cal Poly's agricultural instructors form one of the nation's largest teaching staff in production agriculture; many have personal farming backgrounds. Staff members that have worked in production agriculture are more knowledgeable of procedures and problems encountered and are better prepared to relate this information to students.

Cal Poly's faculty, experienced in hands-on education, has developed and presented conferences, workshops and videos for state and private agricultural consultants. This farm safety education effort has received excellent ratings, but it has been limited in its effectiveness due to the lack of a permanent facility and available current information.

Cal Poly is experienced in the preparation of current and complete educational materials including hand-outs and videos on varied topics in farm safety. Cal Poly has made the commitment to produce training packages that excel in quality. Proof of this fact is shown in the high demand for Cal Poly farm safety materials among subscribers to Vocational Education Productions (VEP), an award winning enterprise of the Cal Poly Foundation specializing in Vocational Agriculture Training instructional materials for agricultural educators.

The campus is serviced by SLONET, a campus wide broadband network for data transmissions. At present SLONET provides communication among a wide variety of computing devices on campus, which include an IBM 3090 model 400E mainframe "supercomputer". NSFNET is included among the many available external networks.

Cal Poly is presently tied into the Advanced Technology Information Network (ATI-NET), a nationwide research and development database. The Cal Poly Agricultural Engineering Department has created a database of farm safety information based on information from the American Society of Agricultural Engineers.

Vocational Education Productions (VEP), the award winning enterprise of the Cal Poly Foundation, sells and distributes vocational educational training information to subscribers worldwide. Booklets and videos prepared by Cal Poly Farm safety staff are among the most requested products offered through this publication.

The contract will be received and administrated by the Cal Poly Foundation, an auxiliary organization established in 1940 to aid the University in its educational and extracurricular mission. The Foundation has administered numerous state contracts, as well as Federal and private awards. The States's Public Contract Code, Section 10340 (b) (3) specifies that such auxiliary organizations in California State University campuses may be awarded contracts through the State Standard Agreement without the requirement for competitive bids.

6. Personnel

Paul Dilger, Associate Professor and Lecturer in Agricultural Engineering at Cal Poly, will be Director of the Farm Safety Institute. Professor Dilger received his MS degree in Agricultural Engineering Technology from Cal Poly and has thirty-five years of on-farm experience in agricultural situations. He has extensive background in agricultural safety and has conducted agricultural safety programs for The State Compensation Insurance Fund and other organizations for the past year.

James Bermann, Professor of Agricultural Engineering, received his M. S. in Agricultural Engineering Technology from Michigan State and his Ed.D. from Brigham Young University. Dr. Bermann will be Assistant Director of the Farm Safety Institute.

Richard A. Cavaletto, Associate Professor of Agricultural Engineering, received his Ph.D in Agricultural Engineering from the University of California, Davis. Dr. Cavaletto has an given extensive presentations and written numerous articles on safety related topics in agriculture. He was a member of the Oregon Bureau of Labor & Industries Task Force on farm safety and the OSU Safety Committee.

M. Stephen Kaminaka, Professor Agricultural Engineering, will be assisting in this project. Dr. Kaminaka received his Ph. D. in

Agricultural Engineering from Cornell University and has an extensive background in human factors in agriculture.

The Institute teaching faculty and staff will be selected on the basis of their hands-on experience in each specialty area and their concern for safety. Outside consultants from industry who have state-of-the-art materials will be asked to assist on a per class basis as needed.

Support staff in year one of this project will include a full time secretary and student assistants who will provide assistance to visitors, clerical, database and resource support. Staff responsibilities will include ordering, stocking and shipping materials and supplies. Maintaining financial records and resource center materials may be assigned to additional personnel as the workload and funding warrant.

Other professional staff from Cal Poly and the Cal Poly Foundation complete the project team. Talented graduate and undergraduate students will assist Professor Dilger and other team members in the completion of this project. Upon request Cal Poly will provide resumes for professional writers, agricultural safety associates and professional staff.

6. Budget

The estimated core support of the annual project is approximately \$250,000. A breakdown of the estimated budget by project cost category is provided in Table 1 and Table 2. Direct costs for labor, per diem and travel expenses shall not exceed State and Foundation authorized amounts.

Substantial funding for construction of the facility has been offered by private industry contingent upon Cal Poly's early approval of the project.

Additional funding will be obtained from corporate sponsors. A meeting has been set in May 1991 to begin soliciting these contributions.

The Institute will remain self supporting through Training Workshops supported by participants fees and corporate sponsors and through materials and resource development.

University Support:

The Director and Assistant Director request release time from instruction for administration and development of the Institute. It is estimated that activities during the first two years will require one half release time per year for each faculty members.

TABLE 1
Agricultural Safety Institute
Budget Year 1

Labor:

Faculty	
Paul Dilger, Director	
1/2 Release time	\$ 30,000
James Bermann, Assistant Director	
1/2 Release time	35,000
Staff (Secretary, etc.)	30,000
Student Assistants	24,000
Technicians @ \$50.00/hr	<u>30,000</u>
Subtotal Labor	\$ 139,000

Benefits:

Faculty and Staff	
\$ 95,000 @ 35%	32,250
Students	
\$ 24,000 @ 2%	<u>480</u>
Subtotal Benefits	\$ 32,730

Materials, Equipment, Supplies:

Construction Materials	
Equipment Rental, Materials, Parking	
Lot Expenses, Fees and Misc.	\$ 100,000
Coursework Development	
Materials, Copyright fees, Binders,	
AV Tapes and Equipment, Supplies, etc.	11,000
Library Development	
Computer, Software File and Record	
Keeping System, Books, Tapes, Periodicals,	
Subscriptions, Storage, etc., Copy Machine,	
Furniture (bookshelves, study tables, desks,	
chairs, etc.)	30,000
Conference Room	
Equipment and Furnishings	5,000
Travel and Per Diem	4,000
Other	
Office Equipment and Supplies, Mailing,	
Phone, FAX, Copies, Janitorial, Hosting,	
Utilities, Misc.	<u>\$ 3,470</u>
Total Direct Costs	\$ 325,200
Indirect Costs @ %	\$
TOTAL BUDGET	\$

TABLE 2
Agricultural Safety Institute
Budget Year 2

Labor:

Faculty	
Paul Dilger, Director	
1/2 Release time	\$ 30,000
James Bermann, Assistant Director	
1/2 Release time	35,000
Faculty Ag Safety 10 % Release time	5,600
Staff (Secretary, etc.)	30,000
Student Assistants	30,000
Consultants @ \$50.00/hr	<u>20,000</u>
Subtotal Labor	\$ 150,600

Benefits:

Faculty and Staff	
\$100,600 @ 35%	35,210
Students	
\$ 30,000 @ 2%	<u>600</u>
Subtotal Benefits	\$ 35,810

Materials, Equipment, Supplies:

Resource Material and Coursework Development	
Materials, Copyright fees, Binders,	
AV Tapes and Equipment, Video Production	
Equipment Rental, Editing Costs, Supplies,	
etc.	\$ 80,000
Library Development	
Computer Costs, Database Expenses, Software,	
Books, Tapes, Periodicals, Subscriptions,	
Storage, etc.	20,000
Classroom Development	
Guest Lecturer Expenses,	
Equipment and Furnishings	5,000
Travel and Per Diem	9,000
Other	
Office Equipment and Supplies, Mailing,	
Phone, FAX, Copies, Janitorial, Hosting,	
Utilities, Misc.	<u>\$ 5,790</u>
Total Direct Costs	\$ 306,200
Indirect Costs @ %	\$
TOTAL BUDGET	\$

APPENDIX A, B, AND C HAVE NOT
BEEN INCLUDED IN THIS AGENDA. They are
available in the Academic Senate Office and
Graduate Studies Office.

State of California

Memorandum

CAL POLY
SAN LUIS OBISPO
CA 93407

To : James Murphy,
Chair, Academic Senate

Date : Jan. 25, 1991

File No.: **RECEIVED**

Copies : JAN 28 1991

Academic Senate

From : Gerald DeMers,
Chair, Constitution and Bylaws Committee *GD*

Subject: Membership of General Faculty, Article I. of the Constitution

The Constitution and Bylaws Committee discussed the current definition of General Faculty. After review of other CSU definitions, the Committee agreed on the following definition:

Voting membership of the General Faculty shall consist solely of those persons who are full-time academic or academic-administrative employees holding rank in the University who are normally providing instruction at least half-time averaged over an academic year. Department Chairpersons, officers of the Faculty and representatives to the California State University Academic Senate will not cease to be members of the Faculty because of any reassigned time allotted to them by virtue of their offices. Full-time athletic coaches, full-time lecturers holding one-year appointments in academic departments, and personnel in Professional Consultative Services, as defined in III.1.b. of the Constitution and Bylaws of the Faculty, are members of the General Faculty. Voting membership of the General Faculty shall not lapse because of leave-of-absence.

Before drafting a resolution relating to this topic, I am requesting that you and/or the Senate Executive Committee review the recommended definition and provide feedback to our committee relating to inclusion of athletic coaches and administrators within the new definition.

Does the section in Article I., referring to.....persons holding faculty rank and occupying a position in an academic department in the university..... refer to Administrators?

Your assistance in this matter is greatly appreciated.

State of California

Cal Poly State University
San Luis Obispo, CA 93407

MEMORANDUM

To: Ray Zeuschner
Chair, Task Force on
Program Review

Date: 4-19-91

File No: progrevu.chg

Copies: ExecCommittee

From: Robert Koeb
Vice President for Academic Affairs
James Murphy
Chair, Academic Senate

Subj: Task Force Duties

Based on guidance from the Academic Senate Executive Committee, we have met and drafted the following charges for your Task Force. Nothing stated herein is intended to specifically limit the activities of your group. Instead, consider these items to be broad and general in nature, unless otherwise stated.

1. Select a Chair;
2. Evaluate the Program Review Data Collection Procedures (previously identified as "Criteria") developed by the Senate Long Range Planning Committee. Based on such a review, corrections and/or adjustments may be in order;
3. Define "program" as it will apply to the Data Collection Processes;
4. Establish Program Review Data Collections Procedures for non-classroom academic programs;
5. Evaluate resources and sources of needed information;
6. Collect information;
7. Determine realistic time-frames for your work keeping in mind such factors as the importance and seriousness of your tasks, the Governor's budget, and other constraints;
8. For resource priority allocations, identify, based on the following:

a. Programs that currently offer a good balance of available resources, that is, are self-supporting;

b. Programs that need additional resources for maintenance;

Therefore based on the above,

c. Programs that can continue with a reduction of resources.

9. Categorize programs based on a, b, and c, above.

10. Assess programs based on the University Mission Statement.

11. Your Task Force may desire to comment on such programs that could or would benefit from restructuring or relocation within the University.

12. Your final report should be submitted concurrently to the Chair of the Academic Senate and the Vice President for Academic Affairs.

ACADEMIC SENATE ELECTION RESULTS
1991-1993

SCHOOL OF AGRICULTURE

Academic Senate

John Harris	NRM
Wesley Mueller	Crop Sci
Marlin Vix	Agribus

Research Committee

Phillip Tong	Dairy Sci
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UPLC

George Hellyer	Agribus
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SCHOOL OF ARCHITECTURE AND ENVIRONMENTAL DESIGN

Academic Senate

David Dubbink	City/Reg Plang
Richard Young	Arch

Research Committee

Larry Loh	Arch
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SCHOOL OF BUSINESS

Academic Senate

Lee Burgunder	Bus Adm
James Buxbaum	Bus Adm
David Peach	Mgt

SCHOOL OF ENGINEERING

Academic Senate

Daniel Biezad	Aero Engr
Chien-Kuo Lo	Civ/Env Engr
Jack Wilson	Mech Engr

Research Committee

Mahmood Nahvi	EL/EE Engr
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UPLC

VACANCY

SCHOOL OF LIBERAL ARTS

Academic Senate

Nancy Clark	History
Barbara Mori	Soc Sci
Alexis Olds	Speech Com
Patricia Troxel	English

SCHOOL OF PROFESSIONAL STUDIES

Academic Senate

Gerald Cunico	Ind Tech
Gerald DeMers	PE/RA

Research Committee

VACANCY

UPLC

VACANCY

SCHOOL OF SCIENCE AND MATHEMATICS

Academic Senate

Christina Bailey	Chemistry
John Marlier	Chemistry

VACANCY

VACANCY

UPLC

Jean Marie McDill	Math
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**ACADEMIC SENATE ELECTION RESULTS
1991-1993**

page two

PROFESSIONAL CONSULTATIVE SERVICES

Academic Senate

Polly Harrigan

Carolyn Proctor

Wendy Reynoso

Housing

Coop Ed

Fin Aid

STATEWIDE ACADEMIC SENATE

Reginald Gooden

Poli Sci

min - Exec 4/23/91
Adopted: _____

ACADEMIC SENATE
OF
CALIFORNIA POLYTECHNIC STATE UNIVERSITY
San Luis Obispo, California

Background Statement:

In 1988, representatives of the Morro Bay Task Force approached President Baker to determine campus interest in establishing a unit which would function as a research arm of a proposed Morro Bay Research Foundation. The Associate Vice President for Graduate Studies and Research called together campus faculty members with research interests in estuarine studies to explore their interest in establishing such a center. These faculty members met over the last three years, developing a theme and expanding their membership to include active representatives from five of the seven schools. The proposed academic unit is intended to be interdisciplinary, and would be situated administratively in the Office of Graduate Studies and Research. The results of that planning and deliberation is expressed in this proposal, forwarded by the chair of the ad-hoc committee for the formation of a Coastal Resources Institute.

Coastal resources (air, water, land, soil, watersheds, beaches, lagoons, estuaries, wildlife, fisheries and nearshore continental shelf) have been seriously threatened and/or altered by California's population growth and development. Many fragile coastal zone areas have been overwhelmed by human activity, resulting in land-use changes, altered runoff volumes and quality, environmental disturbances and degradation, numerous forms of pollution, offshore changes in fisheries, and sedimentary depletions caused by oil and mineral exploration in surrounding watersheds. Much of our coastal zone has been destroyed or altered through man's activities, and no coastal resources have remained untouched.

It is in response to this critical local, regional and international need for coastal resources management that the Coastal Resources Institute (CRI) is being proposed. Studies, programs, and strategies must be developed to mitigate, reverse, improve and/or properly manage the harmful effects that man's activities have had and are continuing to have on the world's coastal environments.

AS-_____-91/____-

RESOLUTION ON

The Proposal to Establish the
Coastal Resources Institute
at
California Polytechnic State University
San Luis Obispo

WHEREAS, the coastal system is experiencing the most rapid human expansion in history; and

WHEREAS, the natural resources of the system are in jeopardy due to this rapid expansion; and

WHEREAS, the coastal system could benefit from interdisciplinary approaches to resources planning and management; and

WHEREAS, Cal Poly, has the technical and professional capabilities to provide such planning and management; and

WHEREAS, the expertise needed to address these issues is spread among a number of schools at Cal Poly; and

WHEREAS, it is desirable to provide these interested faculty members with a focus to concentrate their energies; be it

RESOLVED: That a Coastal Resources Institute be established at California State University as recommended in the attached proposal.

Proposed By:

James R. Vilkitis
Professor
Natural Resources Management
Coordinator for CRI

On: April 22, 1991

CALIFORNIA POLYTECHNIC STATE UNIVERSITY

COASTAL* RESOURCES INSTITUTE

INTRODUCTION

Background

Coastal resources (air, water, land, soil, watersheds, beaches, lagoons, estuaries, wildlife, fisheries and nearshore continental shelf) have been seriously threatened and/or altered by California's population growth and development. Many fragile coastal zone areas have been overwhelmed by human activity, resulting in land-use changes, altered runoff volumes and quality, environmental disturbances and degradation, numerous forms of pollution, offshore changes in fisheries, and sedimentary depletions caused by oil and mineral exploration in surrounding watersheds. Much of our coastal zone has been destroyed or altered through man's activities, and no coastal resources have remained untouched.

The negative economic impact caused by coastal activities continues to grow. Due to the state of crisis facing much of this fragile coastal zone, it is apparent to federal, state and local governments that the coastal zone needs special study and management. Problems facing the coastal zone are unique, multifaceted, and complex. They include various forms of toxic pollution, lost or reduced animal and plant habitat, public access and open spaces, plus the massive effects of land-use changes. Solutions to complex problems are beyond the scope of a single academic discipline. Research and management directives must be coordinated among the various relevant academic disciplines and involve the responsible political authorities in order to develop and implement management strategies within the coastal zone that benefit both nature and man. An interdisciplinary

*The term "coastal/coast", as used in this proposal, defines broad regions of land and water adjacent to, and including the shore. The word is meant to refer to a region(s) of indefinite width that extends from the sea inland to the first major change in terrain features, or the watershed(s) that influences, controls, or determines the features or activities in the ocean-land interface; and to the ocean areas that are impacted by man's activities.

approach is vital to problem solving and a necessity in developing implementation strategies necessary to reverse the present trend of coastal resources degradation.

Proposal

It is in response to this critical local, regional and international need for coastal resources management that the COASTAL RESOURCES INSTITUTE (CRI) is being proposed. Studies, programs, and strategies must be developed to mitigate, reverse, improve and/or properly manage the harmful effects that man's activities have had and are continuing to have on the worlds coastal environments.

MISSION AND GOALS

A balanced, realistic perspective of coastal resources management is vital in attempting to develop programs that successfully integrate the coastal environments' physical, biological, and social aspects. CRI welcomes all professional disciplines involved with and manage the coastal environments.

Mission

The CRI mission is to conduct research, develop programs and strategies that will serve to improve coastal resources management by mitigating the impacts of human development on the coastal environment. Research will be directed toward both narrow, single discipline problems and broader problems requiring multiple disciplines. The latter may address conflict resolution among vested coastal resource users. Management decisions and implementation strategies, within coastal environments, to be effective will be based on current cross-disciplinary analysis, assessment, and evaluation.

Goals

- provide opportunities for faculty, staff and student cooperation and integration by participating in a university-wide, interdisciplinary effort to develop programs to manage coastal resources
- provide opportunities for professional, intellectual, and personal growth through applied research and development activities
- analyze, plan and implement activities in coastal environments that benefit both human and natural systems

- review literature and state-of-the-art technologies that may be applied to the coastal zone
- provide the opportunity for faculty to apply current research and learnings to teaching and instructional programs
- invite the local, regional and national community to participate and promote the transfer of information and technologies through applied research
- conduct cross-disciplinary applied research that will inform the public and decision makers about mitigation, management, and implementation strategies that impact coastal resources
- develop a computerized data base (including literature) and techniques for resources information distribution
- develop educational programs that will inform the public at large as well as decision makers about the major issues, concerns, and opportunities available to management in the coastal zone
- allow interdisciplinary teams the opportunity to work toward a single goal that unifies their research energies
- create an institute which is self-sustaining, is complementary to and enriches other programs, activities, and institutes at Cal Poly
- obtain nonprofit status for CRI
- provide a vehicle (workshops, conferences and symposiums) for the exchange of ideas and skills from the physical, biological, social, and economic sciences, as well as engineering and technology, and the arts and humanities.

NATURE OF PROJECTS

The kinds and magnitude of research activities that could be performed under the auspices of CRI are varied. They could range from simple vertebrate species identification to complex interdisciplinary regional cross impact assessment methodologies. Recently faculty working under the CRI concept have successfully obtained approximately \$ 350,000 in contracts from the Central Coast Regional Water Quality Control Board. The studies include designating the beneficial use categories of water in the Central Coast, leading to the development of a basin plan; another deals with an interdisciplinary assessment of the quantity of mercury entering Lake Nacimiento, and the preparation of a watershed management plan, etc. Faculty used an interdisciplinary team approach to proposal preparation.

The Food Science and Nutrition Department supports CRI and is actively engaged in pursuing research in marine food production development, natural products from the marine ecosystem, and nutritional evaluation of marine food products. Their support and participation could be an important link in solving management problems associated with the population dynamics of marine ecosystems and in identifying and solving problems with harvesting coastal food resources.

A search through the 1990 Annual Report from the Grants Development Office reveals a number of projects that might have benefited from being part of CRI. These include proposals for studying the environmental conditions of Morro Bay, the Monarch butterfly, and local fish populations.

CRI: THE PROPOSED INSTITUTE

It is clear from the formation of local and regional conservation and environmental groups that there is intense national interest in the study, management, and development of coastal resources. However, many study and research needs sought by these groups require institutions with a diverse and interdisciplinary resource base which is generally not continuously available in the public or private sector. Large public/private institutions may contain the expertise necessary for meeting the challenges of the conservation groups, but were not organized for such purposes. CRI would provide the institutional structure and Cal Poly the diverse faculty for such activity while at the same time complementing the educational mission of the university. Government and private agencies would, through the Cal Poly Foundation, be able to contract with CRI for specific research, management and coastal resource studies.

The faculty in Biological Sciences, City and Regional Planning, Civil and Environmental Engineering, Food Science and Nutrition, Landscape Architecture, Physical Sciences, Natural Resources Management, Soil Science, and other departments are enthusiastic at the prospect of developing an institute that would focus on research directed at solving the varied and diverse management problems associated with marine and coastal resources.

Membership

Membership will consist of faculty, and staff of Cal Poly with an interest in studying and researching coastal resource issues. In addition, CRI faculty-selected consultants and research associates working on CRI projects may serve as adjunct faculty to the university. Cal Poly students may be hired to work on projects as adjunct staff.

Organization

The Director of the CRI as a multidisciplinary entity would report to the Associate Vice President for Graduate Studies and Research. The Director/Coordinator of CRI would act as administrator to the institute, providing support to the various projects undertaken by faculty and staff. Each project would have a project director who would be directly responsible for its implementation and accounting. Funds would be managed by the Cal Poly Foundation, which would also serve as the funding recipient on behalf of CRI.

Location

During CRI's demonstration phase it is not anticipated that a specific physical space will be required to conduct activities. The Director would serve as the focal contact for CRI business using his/her university office. Monthly or quarterly membership meetings will be held to update the membership of CRI activities. Other CRI members as identified in the Annual Membership List can serve as a CRI contact. The Applied Research and Development Facility (ARDFA, Bldg #4) and the Natural Resources Management Department in the School of Agriculture have both agreed to house the institute temporarily when physical space is required for specific projects.

The decision on permanent housing will be made when there are sufficient research activities to warrant such space. The Executive Committee will initiate such a request through appropriate university channels. It is anticipated that as research activities increase during the third and fourth year a permanent on-campus location will be necessary. The location could be in Bldg 04 or another site on campus.

Although not a requirement for the successful initiation of CRI, an off-campus research/teaching facility, located on the coast, would be desirable for some CRI activities. It is possible that through appropriate non-university funds such a facility could be secured and jointly used by CRI research faculty, guest scientists and educators. An off-campus, ocean side locality is desirable in such

research needs as in-lab seawater biological studies, nutrition, and mariculture studies, as well as in the housing of equipment used in coastal research.

On California's Central Coast, one of the most attractive and diverse areas of the coastal zone is Morro Bay. It offers a typical example of a complex coastal/urban environmental interface which involves farming, rapid urban growth, overlapping political jurisdictions, a strong environmental movement, a diverse natural environment, etc. It is situated eleven miles from Cal Poly and provides an excellent environmental lab and testing ground for research and development activities associated with the coastal system. Morro Bay could serve as a environmental laboratory, outdoor classroom, and training facility for CRI faculty conducting coastal research projects.

Advisory Board

An Advisory Board composed of 12-30 community leaders will provide outside consultation and direction to CRI and will meet with CRI's Director/Coordinator and project managers at least once a year to review the work and advise on future directions.

Rules of Operation

The CRI shall follow the rules of formation and operation for Institutes and Centers as laid down in Administrative Bulletin 87-3.

Research Activities

The CRI will serve as a multifaceted interdisciplinary research institute for the organization of coastal studies. Such facets will include primary research, applied research, data collection, evaluation, organization, and the enhancement of education in the coastal zone, region, community, Rancho El Chorro, and Cal Poly.

CRI would provide many opportunities for student learning through theses research and class activities. Class projects could be directed toward research and data collection and toward practical resource management problems which contribute to faculty and student learning and development. It is expected that much of the work will benefit the quality of human life as well as the natural environment.

Funding

Initially, start up resources will be requested from the Vice President for Academic Affairs. Costs are assessed to be 0.6 FTE (27 WTU's) and \$10,000 for approximately two years. The FTE's will be

used for the purpose of securing grants, funds, gifts and monies from various sources. CRI will receive the assigned time and monies, and the Director will allocate the resources in conjunction with the Executive Committee. The monies will be used for travel and expenses incurred in securing grants and funding.

It is anticipated that once CRI is official, funds for research activities will be a function of communicating the CRI concept to the various federal, state and local agencies and developing proposals.

During the past three years Cal Poly faculty communicated the CRI concept to the RWQCB which resulted in RFP's totaling about \$500,000. The faculty were successful in securing about \$350,000. This amounted to almost what could be called a sole source contract. There was only one other institution that was allowed to bid on a few of the RFP's. It is anticipated that other federal, state, and local agencies have the same needs as the RWQCB, and that once contact is made and the interdisciplinary concept of CRI communicated, CRI will be able to be financially self sufficient.

Grant funding would be used to support (1) a full and part time technical and clerical staff (2) a core research and administration program, and (3) assigned time for faculty, staff and students. The following schematic identifies approximate positions necessary to implement CRI over a five year period. Funding for some of these positions will come from contracts.

YEAR	1	2	3	3	5
A d m					
Director	.25	.50	.75	.75	1.0
Assoc. Dir.		.25	.50	.50	.50
Clerical	.50	.75	1.0	1.0	1.0
Technical	.25	.50	.50	.75	1.0
Assigned Time	.25	.25	.50	.50	.75
Projects					
RWQCB	X	X			
OTHERS		X	X	X	X

Basic grant administration costs of the Foundation and the university will be covered by indirect costs generated from CRI grants. The RWQCB contracts have indirect costs of approximately 25% which, over a two year period, will bring about \$8,000 back to CRI for infrastructure cost.

During the first two years of operation, in order to adequately cover CRI infrastructure cost, CRI is requesting 1.2 FTE's and \$20,000. This will be supplemented by the 40% uncommitted indirect costs that are returned to the project.

For all proposals generated for the first five years CRI will stress that they carry the maximum indirect cost rate of 49% of salaries and wages. This will allow CRI to become self-sufficient within three years.

In addition, depending on the sponsor and circumstances of the RFP, CRI will require that administrative activities for each project be covered as a line item in the budget.

During our start up period CRI faculty will actively seek other sources of funds which may include gifts, donations and co-funding or the selling of memberships to cover administrative costs. The latter may allow sponsors greater access for research endeavors.

When projects require physical space, CRI will utilize ARDFA, Bldg 04, and take advantage of the sharing of indirect costs identified in Adm. Bulletin 90-2. It is anticipated that by year five, CRI will be housed in Bldg 04 or have its own structure. Within five years, it is anticipated that a university policy dealing with indirect cost sharing will be developed for applied research facilities that do not have general fund or other continuing sources of support.

The Cal Poly Foundation, through CRI, would serve as a recipient of funds for research proposals which would be developed as either part of a master research program developed for CRI, as an independent faculty-generated project, or at the request of outside agencies or organizations.

CRI is proposed as a nonprofit institute, and will be under the jurisdiction of the Cal Poly Foundation.

Resources/Facilities

Initially CRI will utilize campus, department and faculty resources, e.g. computer, library, and laboratory facilities. The faculty that are involved with developing this proposal have expressed a willingness and desire to work together and to share resources and facilities to accommodate the development of CRI.

The faculty will schedule research activities on campus so that resource facilities will not impact any existing programs or activities. The start-up resources that will be used for CRI are presently available to faculty and will not be utilized in any way that will detract from the primary purpose of education.

It is difficult to predict, with any degree of certainty, the type of resources that will be necessary. The following is an appropriate subset of what might be necessary and represents a reasonable view of the type of functionality required. This list is approximate as to machine and software type, and merely serves as an indication of the level of sophistication that may be required. Most, if not all, of these resources are available on campus.

- HP 9000 Workstation and Supporting CAD/CAM Software
- DEC VAX Station and Supporting CAD/CAM Software
- GIS system, including digitizer, plotter
- Apple and IBM PC network
- SLONET access
- Access to a data base machine (IBM)
- VT 3 xx
- A specific set of software applications, operating systems and language that can be used for research

Current hardware systems available for use on campus include an IBM/3090/400E Super Computer, Sequent Balance 8000, SUN network, DEC VAX 750 and pyramid 98XE. Cal Poly's mainframe is linked by a system-wide network to computing resources at other CSU campuses, large data base national networks and information services. Several microcomputer facilities are available at Cal Poly for research and development.

The Kennedy main library at Cal Poly has reasonable coastal research literature available at the present time. An inter-library loan program would facilitate access to library resources outside of the main library.

PROGRAM DEVELOPMENT

Data Base and Clearinghouse

The CRI will initially start forming a data base on the Central Coast watersheds through research projects from RWQCB. The data base will be extended to other watersheds, environments and coastal regions as research opportunities become available.

The initial data base generated from the biological and physical science, and engineering disciplines will include species lists, habitat inventories, watershed geologic and sedimentation data, water and sediment physics and chemistry, tidal flow, hydrology etc. A related data base on ocean, coastal, and environmental engineering would also be developed. Facilities currently exist in the Natural Resources Management and Landscape Architecture Departments and in the School of Engineering to store and manipulate this type of data with expert graphic information systems, such as ARC/INFO.

It is expected that state, federal and local governments/agencies would cooperate in using and funding this information data base, and that the presence of CRI would enhance relationships between the university and those agencies by providing a current and comprehensive data base for management, educational and research endeavors.

As a clearinghouse, the CRI would create a forum for defining, studying, and resolving public policy and resource management issues in the coastal zone. The forum could incorporate national, state, and local policies, especially those involving conflict-resolution of matters such as marine terminal basing, offshore oil drilling, land use policies, pollution control and property rights. This function may develop into an economic and geoeconomic model building exercise with complex cost-benefit analysis within a multifaceted economy.

Development of Descriptive and Predictive Models

Natural Resources Management, Landscape Architecture, Physical Sciences, Biological Sciences, Civil and Environmental Engineering, and other departments have a great interest in developing and expanding software and computer systems for preparing computer simulated models.

Initially the models would include basic physical, social and biological features in the landscape and develop into integrated

holistic predictive simulation models capable of simulating a variety of political, social and engineering scenarios.

Development of Specific Research Programs

It is important that research projects be conducted with a sense of continuity, cross-disciplinary cooperation, and that these projects contribute to research, education and management of the coastal ecosystems. Research endeavors should be directed, proposed and guided by the mission and goal statement of the CRI.

Some research areas identified by CRI faculty which have immediate potential for funding are:

- Salt water contamination and intrusion
- Beneficial use designations for water bodies
- Dredging impacts on Morro Bay (physical, biological, social, and political)
- Land use changes
- Enhancement of rare plant habitats
- Identification of eel grass habitats/use in the estuary
- Land use conflicts
- Political and jurisdictional management conflicts
- The estuary as a marine nursery
- Interdisciplinary management implementation models
- Human population growth patterns
- Erosion and sediment in filling of tidelands
- Patterns of land development
- Hydraulics of tidal and wave action on beaches and bay environment
- Coastal modeling

Public Education

The CRI expects to work with docents of museums, conservation and industry groups, local and county planners, and others in communicating the critical factors influencing the management of the coastal zone. The CRI faculty can play an important role in developing education and outreach programs through technology transfer methodologies for local, state and federal governments and agencies.

Enhancing Student Programs

The presence of specific research and public information programs developed by CRI would facilitate and enhance teaching programs utilizing new research data and interdisciplinary team activity. Biology, Engineering, Geology, Land Use, Political Science, and Resource Management courses would gain from the presence of CRI's facilities, student project opportunities, and from the sense of continuity developed by student contribution to a program of greater scope. In the future it is likely that CRI could provide opportunities to substantially enhance the university's curriculum research and information transfer mechanisms.

SOURCES OF FUNDING

The Institute shall be self-sustaining, with funds coming from grants developed by the Director/Coordinator and CRI members. In kind contributions from the university, in the form of office and laboratory space, may be required in the initial stages of formation.

One of the prime advantages of the CRI will be to act as the recipient of grants, awards and contracts through Cal Poly Foundation. The CRI interdisciplinary approach to proposal development is considered very advantageous in obtaining funds, as opposed to a proposal developed by a single faculty member or discipline. It is especially important when addressing coastal resources problems to develop proposals that are interdisciplinary and regional in scope.

The CRI would coordinate faculty and students to participate in interdisciplinary efforts and provide a means to secure resources that would otherwise be unattainable by a single researcher or discipline. It is anticipated that outside resources, during times of limited funds, could improve facilities for applied research and instructional programs.

Sources

- State of California Department of Fish and Game
- U S Army Corps of Engineers
- California Regional Water Quality Control Board
- State of California Coastal Conservancy
- Nature Conservancy
- San Luis Obispo County
- California Department of Transportation
- Land Conservancy

- San Luis Obispo County
- California Department of Parks and Recreation
- California Department of Forestry and Fire Protection
- Pacific Gas and Electric
- U S Fish and Wildlife Service
- Port San Luis
- PG&E
- Private Industry
- Foundations

Coordination

CRI expects to work very closely with other institutes and centers within the university and with groups outside the university that will be independently seeking grant monies. For example, the Bay Foundation, if Morro Bay, may seek grants but does not have the technical capability to complete the project. CRI will be able to provide the technical capabilities needed to supplement their proposal. Groups, within the Central Coast, such as the Coastal Conservancy and Regional Water Quality Control Board may want to utilize CRI's pool of researchers rather than relying on institutions in other regions to provide solutions to local environmental problems.

It is expected that CRI would act closely with Federal and State agencies such as the U S Fish and Wildlife Service, California Department of Fish and Game, California Department of Parks and Recreation, Coastal Conservancy, U S Army Corps of Engineers, and the Environmental Protection Agency. This would be an advantageous relationship for students, faculty and the environment.

KEY FACULTY

- School of Agriculture
 - Brent G Hallock Ph.D. Professor of Soil Science.
Environmental Assessment. Septic Systems and
Land Use.
 - Stephen M Kaminaka Ph.D. Professor of Agriculture
Engineering. Waste disposal systems and
computer applications
 - Robert O Noyes Ph.D. Professor of Food Science
and Nutrition. Coastal food resources (fisheries).
 - Joseph Montecalvo Ph.D. Professor of Food Science
and Nutrition. Coastal food resources (fisheries).

- Mary E Pedersen Ph.D. Professor of Food Science and Nutrition. Coastal food resources (fisheries).
- Douglas Piirto Ph.D. Professor of Natural Resources Management. Coastal Forest Resources Management.
- Thomas J Rice Jr. Ph.D. Associate Professor of Soil Science. Sedimentation erosion.
- James R Vilkitis Ph.D. Professor of Natural Resources Management. Regional resources planning and interdisciplinary team management.

•School of Architecture and Environmental Design

- Linda Dalton. Professor of City and Regional Planning. Local and regional planning, assessment and implementation.
- David Dubbink Ph.D. Professor of City and Regional Planning. Coastal Management and Policies.
- Gerald L Smith. Professor of Landscape Architecture. Five Interested Faculty. Computer applications of geographic information systems, landscape analysis, assessment, planning, visual impact analysis.

•School of Engineering

- Marshall L Anderson Ph.D. Professor of Civil and Environmental Engineering. Transportation engineering. Civil engineering.
- Harold M Cota Ph.D. Professor of Civil and Environmental Engineering. Water and Air Quality. Hazardous Wastes and Pollution Control.
- R. V. Craig Ph.D. Professor of Civil and Environmental Engineering. Structural engineering.
- Jay Scott DeNatale Ph.D. Associate Professor of Civil and Environmental Engineering. Geotechnical engineering.
- Stephen Hockaday Ph.D. Professor of Civil and Environmental Engineering. Fifteen Interested Faculty. Transportation, Port Systems, Geotechnical, Structural, and Water Resources.
- Carl C F Hsieh Ph.D. Professor of Civil and Environmental Engineering.
- Chien-Kuo Lo Ph.D. Associate Professor of Civil and Environmental Engineering. Hydraulic engineering.

- H. Mallareddy Ph.D. Professor of Civil and Environmental Engineering. Wastewater treatment. Hydrology.
- Edward A Nowatzki Ph.D. Associate Professor of Civil and Environmental Engineering. Soils and Geotechnical Engineering.
- Celina U Penalba Ph.D. Lecturer of Civil and Environmental Engineering. Marine structures and dynamic load engineering.
- Robert Earl Sennett III, Ph.D. Professor of Civil and Environmental Engineering. Civil engineering and engineering mechanics.
- Shan Somayaji Ph.D. Professor of Civil and Environmental Engineering. Structural engineering. Corrosion engineering.
- Edward C Sullivan Ph.D. Associate Professor of Civil and Environmental Engineering. Traffic and highway engineering.
- Samuel Vigil Ph.D. Professor of Civil and Environmental Engineering.

•School of Liberal Arts

- Richard Kranzdorf Ph D.. Professor of Political Science. Policies of Continental Shelf Development.
- Dianne N Long Ph.D. Professor of Political Science. Political structure, implementation strategies, sampling methodologies, and environmental impact assessment

•School of Science and Mathematics

- Leslie S Bowker Ph.D. Professor of Biological Sciences. Computer applications to biological systems
- David H Chipping Ph.D. Professor of Physics. Geography, Hydrogeology and Sedimentation.
- Royden Nakamura Ph.D. Professor of Biological Sciences. Aquatic fresh and salt water biology.
- Thomas L Richards Ph.D. Professor of Biological Sciences. Aquatic invertebrates
- Aryan I Roest Ph.D. Professor of Biological Sciences. Vertebrate Zoology.

DRAFT 29 MARCH 1991

BYLAWS
COASTAL RESOURCES INSTITUTE
California Polytechnic State University
San Luis Obispo, California

These bylaws are applicable within the authorization established by the Board of Trustees of the California State University (CSU) and the California Polytechnic State University (Cal Poly).

ARTICLE I - NAME

The name of this organization shall be the Coastal Resources Institute (CRI).

ARTICLE II - PURPOSE

Section 1 - Direction

The CRI is a non-profit, non-partisan organization established for educational, research, and service purposes. The CRI will promote the study of coastal resources, their management, and public participation in the decision making process. The CRI programs will be of an applied nature involving students, faculty, and community.

Section 2 - Policies

The policies of CRI shall be in harmony with the policies of the Trustees of the CSU system and Cal Poly.

Section 3 - Dissolution

In the event CRI is dissolved, its assets remaining after payment of, or provision for payment of, all debts and liabilities shall be distributed to the Cal Poly Foundation in trust for the University.

ARTICLE III - MEMBERSHIP

There shall be one class of membership and each member shall have equal rights and voting privileges. Only faculty and staff of Cal Poly shall be members of CRI; membership is open to all interested faculty and staff.

DRAFT BYLAWS, CRI 29 MARCH 1991 J R VILKITIS/NRM

The Director and the Executive Committee of CRI shall acknowledge members through the publication of an annual list.

ARTICLE IV - CRI ADMINISTRATION

Administrators of CRI shall consist of a Director, Associate Director(s), Research Associate(s), and those others selected by the membership with the consent of the Executive Committee. The Director shall carry on the day to day management and administrative activities of CRI. The Associate Directors may be identified for administration, new project development, capital campaign, etc. Research Associates may be identified for specific research projects.

Staff members shall work under the direction of an administrator who is supervised by the Director. Staff members are those persons serving the University in an instructional or non-instructional program of CRI.

The Director will report to the Associate Vice President for Graduate Studies and Research.

ARTICLE V - ADVISORY BOARD

Section 1 - Composition

The Advisory Board to CRI shall consist of at least nine but no more than 30 persons recommended by the membership and approved by the President of Cal Poly.

Section 2 - Powers and Duties

The Advisory Board shall provide advice and comment on CRI programs, shall engage in public relations and fund raising for CRI programs, and shall provide overall guidance and direction to CRI. The Advisory Board may select such additional persons to serve as non-voting Honorary Advisory Board members as it deems appropriate.

Section 3 - Meetings

The Advisory Board shall meet at least once a year to review CRI programs and to provide general direction. The Advisory Board shall select a chair who will preside at meetings. The chair shall serve for one year and can run for re-election. The date of the Advisory Board meeting shall be at the pleasure of the Advisory Board.

DRAFT BYLAWS, CRI 29 MARCH 1991 J R VILKITIS/NRM

Section 4 - Number Constituting a Quorum

A majority of the Advisory Board then in office shall constitute a quorum for the transaction of business at a meeting of the Advisory Board. The members present at a duly called and held meeting at which a quorum is initially present may continue to do business notwithstanding the loss of a quorum at the meeting due to a withdrawal of members from the meeting.

ARTICLE VI - EXECUTIVE COMMITTEE

Section 1 - Composition

There shall be an Executive Committee composed of the Director of CRI, five other members of the University and three members of the Advisory Board who are non-voting members.

Section 2 - Membership

A nominating committee of the membership shall propose Executive Committee members for vote by the membership. In the first year of operation, members to the Executive Committee will be recommended by the membership and approved by the Associate Vice President of Graduate Studies and Research.

Section 3 - Meetings

The Executive Committee shall meet once each quarter, except summer quarter.

Section 4 - Duties

The Executive Committee shall provide the general guidance related to the business activities and affairs of CRI. The Director shall implement those decisions.

A report of CRI activity shall be submitted to the Advisory Board for information at its Annual Meeting with the Honorary Board unless a special meeting is called for that purpose.

Section 5 - Terms

The Executive Committee shall serve staggered three (3) year terms of office.

Section 6 - Conduct of Meeting

Meetings shall be governed by *Robert's Rules of Order*, as such rules may be revised from time to time, insofar as such rules are not inconsistent with or in conflict with the CSU and Cal Poly.

ARTICLE VII - FISCAL POLICIES

Section 1 - Fiscal Year

The fiscal year shall be in accordance with that specified by Cal Poly.

Section 2 - Accounts and Audit

The books and accounts of the CRI shall be kept by the Cal Poly Foundation in accordance with sound accounting practices, and shall be audited annually in accordance with Cal Poly policies.

ARTICLE VIII - OPERATING GUIDELINES

The Executive Committee may develop operating guidelines to implement these bylaws.

ARTICLE IX - AMENDMENTS

The bylaws may be amended by a 2/3 vote of the members of the Executive Committee voting at any meeting of CRI. Each member shall have two (2) weeks advance written notification of the proposed amendments.