

Tri-County Neighbors

ENVIRONS is published three times a semester by the Environmental Law Society, University of California Davis School of Law. Its purpose is to act as a one-stop clearinghouse for the dissemination of all environmental information relevant to the Solano-Yolo-Sacramento tri-county area. To date, there is no publication that covers the field of environmental law for these counties. The present scarcity of readily accessible information combined with a firm commitment to informing the public provided the catalyst for this project.

ENVIRONS will present its analysis of all substantive issues by utilizing an objective, non-partisan format. This editorial policy was selected in the hope of reaching all segments of the population. The need to know is not limited to either extreme of the political spectrum.

Each issue of **ENVIRONS** will contain articles of local environmental concern, an upcoming events calendar, a status summary of relevant pending legislation, a review of the most recent environmental literature, and a profile of a local prominent figure.

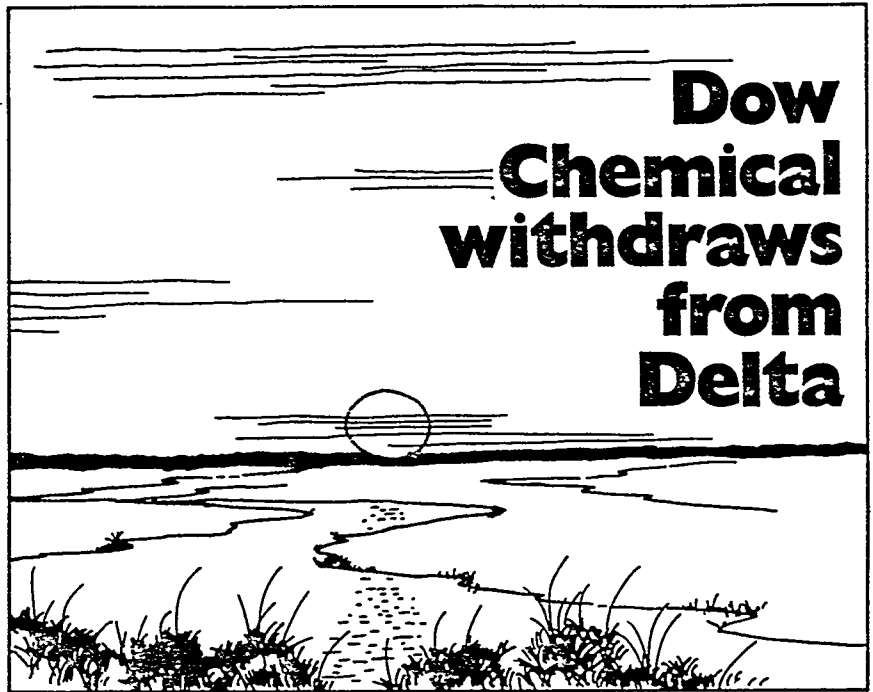
The Environmental Law Society has established liaisons with governmental agencies, organizations, and individuals with an environmental orientation in the tri-county area. The liaisons are the initial sources for the information found in **ENVIRONS**.

ENVIRONS is partially funded through the generosity of the UC Davis Law Students' Association and the Davis Chapter of the Northern California Public Interest Research Group. We sincerely appreciate their concern.

Thank you for reading the first issue of **ENVIRONS**.

Sam Imperati
Editor

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Dow Chemical withdraws from Delta

On January 19, 1977, the Dow Chemical Company indefinitely delayed its plans to build a \$500 million petrochemical complex in Solano County.

In explaining the pullout from the Sacramento River Delta, Dow's West Coast General Manager Ray Brubaker said, "The permitting process for new facilities has proved to be so involved and expensive that for the time being, at least, it is impractical to continue with this project."

In order to obtain complete governmental approval of the proposed facility, Dow had to secure sixty-five permits from twelve local, state, and federal agencies. After 23 months and a four-million dollar expenditure for engineering and environmental studies as well as applications, Dow had obtained conditional approval for only four permits.

Much of the post-Dow debate has focused on ways of simplifying the bureaucratic labyrinth, which is seen by some as inhibiting industrial development in California. The fear, obviously, is that business will be reluctant to invest in the state, posing ominous consequences for the state's economy and, in particular, its already-high unemployment rate.

Legislators Act

The legislative response to preserving a "pro-business" image for the state has ranged from proposals to consolidate and simplify the permit process to Assemblyman Dan Boatwright's resolution (ACR 9) calling for all state agencies reviewing Dow's applications to approve them as soon as possible.

The principal arguments in favor of the complex are economic. According to its Environmental Impact Report (EIR), Dow would permanently employ approximately 1000 workers at an annual payroll of some \$15 million. Moreover, the five-to-eight-year building period needed to complete the thirteen plants would temporarily employ another 1000 construction workers. Solano County stood to net some \$1.8 million each year in property taxes, which would add one-seventh to the county's current property tax revenue.

Opponents of the facility feel that the employment issue is being over-emphasized. A half-billion-dollar investment in one thousand jobs, they point out, comes to a highly capital-intensive average of \$500,000 per job.

Also, according to the state's Employment Development Department (EDD) figures released on March 8, the unemployment rate in California has dropped to 7.8%, just .3% above the national average and more than a 2% drop since last year. EDD's new jobs were created in California in 1976 - a rate 30% higher than the average nationwide.

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Laguna Creek Study Area

Sacramento County has embarked on a unique approach to land development in the Laguna Creek area.

For the first time in county history, an unusually large land parcel is being analyzed for potential use *before* any significant development has taken place. And unlike the typical land use plan, this study determines "what" and "where" development should occur based upon economic and cultural projections, as well as the condition of the natural environment.

"Ecological planning," as it is called by Al Freitas, Senior Planner and Study Coordinator, avoids piecemeal decision-making, which often results in less than optimal land use. It also recognizes the environmental "opportunities and constraints" of the region.

The Laguna Creek area consists of 18 square miles located approximately 12 miles south of downtown Sacramento. It is bounded by Interstate 5 on the west, State Route 99 on the east, Elk Grove Boulevard on the south, and the proposed State Route 148 on the north. Ninety-three per cent of this essentially flat land is currently used for marginal agricultural purposes. Laguna Creek, a stream bisecting the region, subjects it

to periodic flooding. Most of the approximately 900 residents reside at the northern end of the project in low-density suburban residences.

County Hires Consultant

The County Board of Supervisors commissioned a study in the spring of 1975. They believed the area, designated for eventual urban development in the 1973 General Plan, might be ripe for massive development. This became an issue when major landowner-developer, Kloyd Pedersen, sought approval for initial construction along the lines of his areawide program. The Board rejected Pedersen's plan and instead hired a planning firm to make recommendations which would serve as a blueprint for regional development over the next twenty years.

The first public report of the Laguna Creek Study was presented to the County Planning Commission on November 9, 1976. Final Commission approval was granted in early 1977. The plan was referred to the City of Sacramento for review and comment prior to final hearings before the County Board of Supervisors.

There has been little dispute as to the desirability of a comprehensive plan for ultimate development of the entire area. The report states past development trends in Sacramento County have resulted in "monotonous, undifferentiated and visually unappealing urban form characterized as urban sprawl." By confining all prospective growth to that which conforms to the total plan, the County hopes to reverse the trend.

The disagreement centers around two questions: A) What should the plan contain? B) When should the various phases be implemented?

Plan Contents Differ

The County plan is unlike Pedersen's in several respects. It locates the commercial/community center in the middle of the project rather than at the southeast corner, and it calls for more multiple-unit housing.

Pedersen is particularly critical of two other changes, however. The County proposes to group all medium-density housing along a six-lane highway which will bisect the development. Pedersen's proposal, on the other hand, has no major roads going through the residential areas. He also prefers to mingle housing densities throughout the development, while the County desires to segregate all housing according to specific density categories.

Phased Growth....Where?

The biggest controversy, however, rages over the phasing of the project. The County Planning Commission has recommended initial construction occur at the northern end of the region since it would be contiguous to existing development. Subsequent expansion would be allowed only as capital improvements develop southward. The County contends this would prevent a premature need for "major unwarranted and fiscally inefficient extensions of urban services."

The City of Sacramento owns approximately 18 per cent of the area's northern end. They support the

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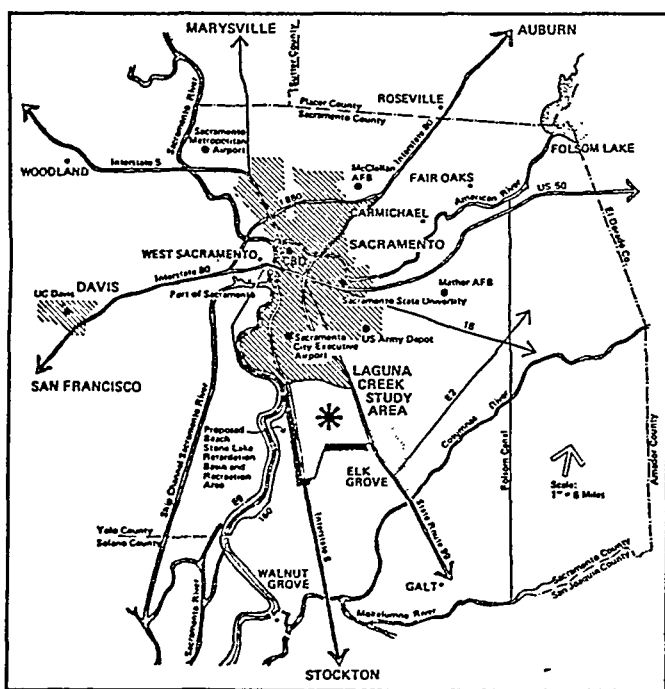


CONTAINS RECYCLED
MATERIALS

phasing recommendations. They are particularly concerned with the potential fiscal consequences of unphased growth. Ethan Browning, City Planning Director, pointed out the initial impact of any significant development would fall on the existing City street system. The consultants noted the system is currently inadequate to support major growth and it will remain so until Interstate 5 and State Route 99 become readily accessible.

Browning says Cal Trans has indicated construction of the seven freeway interchanges shown on the plan may be delayed by fiscal conditions for many years. The recommended phasing, the City feels, is essential to avoid an undue financial burden which will result if it has to accommodate the need for new and wider existing roads.

County officials also contend they are presently unable to afford the massive financial investment full-scale development would require. The consultants estimate new road construction alone will ultimately require a governmental expenditure of over \$10 million. (After 20 years, the projected revenues generated by the development will amount to \$330,000 per year, while the minimal annual road maintenance costs will amount to



\$200,000. Thus, relatively little will remain for capital expenditures.)

Pedersen, whose southeast sector lies in the phase two area, disagrees with this assessment. He believes even with fifteen-year phasing, initial construction can still begin along Franklin Boulevard and State Route 99. He feels these two roads are temporarily adequate to handle the transportation needs. In fact, the report states the southeast area is the logical choice for the second phase because it does afford good access via existing roads. Pedersen contends even if it takes Cal Trans five to six years to build the projected State Route 148, this will relieve any undue burden on City streets by providing the necessary link between Interstate 5 and State Route 99.

The Environmental Council of Sacramento (ECOS) sees this development as a direct violation of the policy

enunciated in the 1973 General Plan: "...discourage urban sprawl." Clyde Macdonald, president, feels any immediate construction will not only create unnecessary increases in road expenditures, but will cause unwarranted air pollution. "The plan may be fine when the time comes," he says, "but the time is not now."

ECOS' position is not without legal support. The Los Angeles County Superior Court struck down portions of that County's general plan last July. The court said such plans "must be designed to discourage the premature conversion of existing open-space land to urban uses wherever possible." Section 65561 of the Government Code, additionally, declares that discouraging such growth will be beneficial because "...noncontiguous development patterns ...unnecessarily increase the costs of community services to community residents."

Can Such Planning Work?

Is comprehensive large-scale planning combined with phased growth a viable zoning technique? The fiscal impact of some planned unit developments can create varied problems. In a study of two communities located in Fairfax County, Virginia, Ida Cuthbertson found revenues from Reston (a "new town") were more than adequate to sustain public service costs, while West Springfield, (a "conventional suburb") relied on county funds to make up its deficit. The two developments were similar in many respects but Reston had enough industry within its borders to generate needed tax revenue while West Springfield was almost entirely residential. The Laguna Creek consultants estimate the project will ultimately be self-supporting except in meeting its need for new roads.

Regardless of the substantive content of a comprehensive plan, a developer will face drawn-out procedures which may discourage him from embarking on such projects. A major constraint on large-scale development, says Thomas Black of the Urban Land Institute, is the need for private developers to invest large amounts of money in land acquisition, planning, negotiations with public agencies, infrastructure development, and carrying costs prior to development. To offset these costs, large-scale developers have traditionally been forced to locate projects at some distance from the suburban fringe. There they can assemble large tracts of land before land values escalate to urban market levels.

Pedersen's experience illustrates these drawbacks. The developer spent three years in buying the land, and almost seven more in efforts to obtain county approval. If there is no immediate prospect of initial construction, he claims he cannot afford to keep the land. If the land does revert to individual ownership, Pedersen believes the County cannot realistically hope to maintain conformity to the plan.

Al Freitas admits planned development is more likely to succeed where land is owned by one or a few individuals. The consultants seem to agree. Pedersen's area, they say, has the "advantage of being in a single ownership." On the other hand, Freitas argues, smaller planned developments in the county, such as Campus Commons, have been reasonably successful in maintaining plan integrity. If the Planning Commission is willing to make a firm commitment to the study recommendations, he feels future development of Laguna Creek, at the very least, will be greatly influenced by those goals.

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pending legislation:

Air Pollution:

SJR 6 (Nejedly) A Joint Resolution requesting Congress to review the federal Clean Air Act and its regulations in order to impose less restrictive standards in California because "this regulation may affect the future plans of Enterprises to locate or expand in California."

SB 13 (Holden) Repeals sections 43654 and 43610 of the Health and Safety Code which requires installation of nitrogen oxide emission control devices on 1966 through 1970 model motor vehicles. It was sent to the Transportation Committee.

SB 188 (Holmdahl) Under state law, the State Resources Board is authorized to adopt and implement motor vehicle emission standards for new cars sold in the state. This bill would prohibit the board from denying certification of any new 1979 motor vehicle in compliance with EPA standards or with standards adopted by the state board for 1977, whichever is stricter, without approval of the legislature.

AB 724 (Sieroty) Would generally increase the fines imposed for violation of air pollution statutes and regulations. It would also add a provision that willful or negligent violations will be subject to a larger fine than non-willful or non-negligent violations. It would authorize civil actions for violations to be brought by a city attorney as well as the Attorney General, the district attorney or the attorney for an air pollution control district.

CEQA:

SB 351 (Holmdahl) Amends the California Environmental Quality Act to require public agencies to consider the social and economic consequences of a project as well as the environmental impacts in making a determination of whether or not to pursue the project.

Endangered Species:

AB 137 (Vicencia) Existing state law makes it a misdemeanor to import or sell the dead body or any part or product of animals specified as endangered species. This bill would remove the prohibition against the sale of parts or products of the animals. Referred to the Committee on Water.

Energy:

SCA 15 (Alquist) Would authorize the legislature to exempt from the property taxation all or part of property used as a solar energy system. Referred to the Committee on Revenue and Taxation.

SCR 23 (Johnson) Requests agencies and divisions of local and state government to effect policies encouraging the production and exploration of natural gas and recommends deregulation of gas supplies in interstate commerce.

SJR 10 (Johnson) Requests Congress to amend the Natural Gas Act to remove the controls on exploration and pricing of natural gas so long as the price does not exceed the price of fuel oil or other petroleum products.

AB 77 (Goggin) Authorizes the allocation of up to \$1,000,000 to the Energy Commission for conducting research relating to undergrounding of nuclear reactors. It passed the Assembly on January 1 and is now being considered by the Senate Finance Committee.

AB 220 (Goggin) Enacts the California Natural Gas Act, which provides for the siting of loading, regasification and storage facilities for liquified natural and petroleum gas under jurisdiction of the Energy Commission. Also adds a research and development program for new gas resources and for substitute clean fuels.

Land Use:

AB 222 (Warren) California Agricultural Lands Act creates the Agricultural Resources Council which would delineate the location and boundaries of prime agricultural lands and would prescribe the uses permissible within these areas. Referred to the Committee on Resources Land Use and Energy.

Solid Waste Control:

SB 4 (Rains) Beverage Container Recycling Act - provides for the payment of refunds on all beverage containers sold after January 1, 1978.

SB 68 (Smith) **SB 160** (Alquist) These bills are substantially similar. **SB 68**, The Used Oil Recycling Act, would require the adoption of rules regarding the collection and disposal of used oil and the maintenance of an information center. **SB 160**, The Oil Rerefining Act, would additionally require that rerefined oil be used for all state purposes whenever available at competitive prices. Requires all service stations to maintain used oil retention facilities.

Water Pollution And Conservation:

SB 167 (Smith) Removes the intentional or negligent requirement for civil liability for oil spills. Provides strict liability except when spills are caused by an act of God or a third party.

SB 229 (Smith) Allows the Department of Water Resources to conduct a water conservation program, including distribution of conservation devices to residences and public buildings.

AB 394 (Gualco) Allocates \$13,000,000 to the Department of Water Resources for a statewide program of water conservation.

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viewpoint:

BILL KOPPER

City Council, Davis, California

(Graduated University of Chicago in Biology/Ecology; Director of Ecology Center at Ann Arbor, Mich.; worked with Environmental Action in Berkeley, Ca.; after coming to Davis studied and worked with Prof. Wilson Goddard in environmental studies and on 'small farm' projects; one of the founders of the Davis Environmental Coalition; has since done research in energy conservation in homes; and now works with Living Systems in Winters, Ca.)

Bill Kopper has been a leader in the development and adoption of energy use and conservation plans and policies for the City of Davis. In fact, many of these plans and policies were first given substance in work done by Bill Kopper and David Bainbridge at Living Systems in Winters, Ca. In a draft report entitled Planning for Energy Conservation (prepared by Living Systems with a H.U.D. Innovative Project Grant and published June 1, 1976), a variety of energy use and conservation plans were formalized into possible city ordinance or city resolution formats specifically for the City of Davis.

Much of this work and many of these proposed plans including those already adopted and those currently under consideration in Davis, are applicable to many other communities as well.

JUST WHAT ARE SOME OF THESE PLANS, THEIR POTENTIALS AND THEIR APPLICATION IN DAVIS AND OTHER COMMUNITIES? BILL KOPPER COMMENTS:

"The city's building codes...should be changed in such a way that you set fairly rigorous building standards. In some cases a good building code will require southern exposures (of homes) to be protected from infringement by neighbors. This is an important factor in the future development of solar heating.

"I think there are a number of ways to protect these southern exposures. You can do it by the 'envelope easement' idea (restrictive zoning and the creation of easements to protect neighboring landowners' rights to sunlight); or you, the city, can just say that you can't plant evergreen trees in certain places; or you can have a city tree trimmer who will... protect people's solar exposure by trimming any interfering tree growth.

"In the city's planned development process..., shading of structures, one structure by another, is one of the considerations to be looked at.

"The new houses that are built to the Davis Energy Conservation Code...don't really need any air conditioning, which is a major residential use in the summer. If you have good insulation, you don't have radiant gain of heat through the windows, and if you ventilate at night (when we have those cool nights)...then you really can have a cooler, energy-saving home."



WHAT ARE SOME OTHER THINGS THE COMMUNITY CAN DO TO HELP CONSERVE ENERGY IN RESIDENTIAL AREAS?

"In our type of climate...I think we should go back and put islands (with trees and other vegetation planted in them) in the middle of those wide streets because you do lower the temperature of the neighborhood and make it...more pleasant and make the homes there use less energy for airconditioning."

WHAT CAN THE COMMUNITY DO TO LIMIT OTHER ENERGY USES? FOR EXAMPLE, ENERGY USED FOR TRANSPORTATION...

"Well...the city can discourage driving. (However, it will take a much higher priced gasoline, finally, to discourage those people who are too 'into' the convenience of driving.)

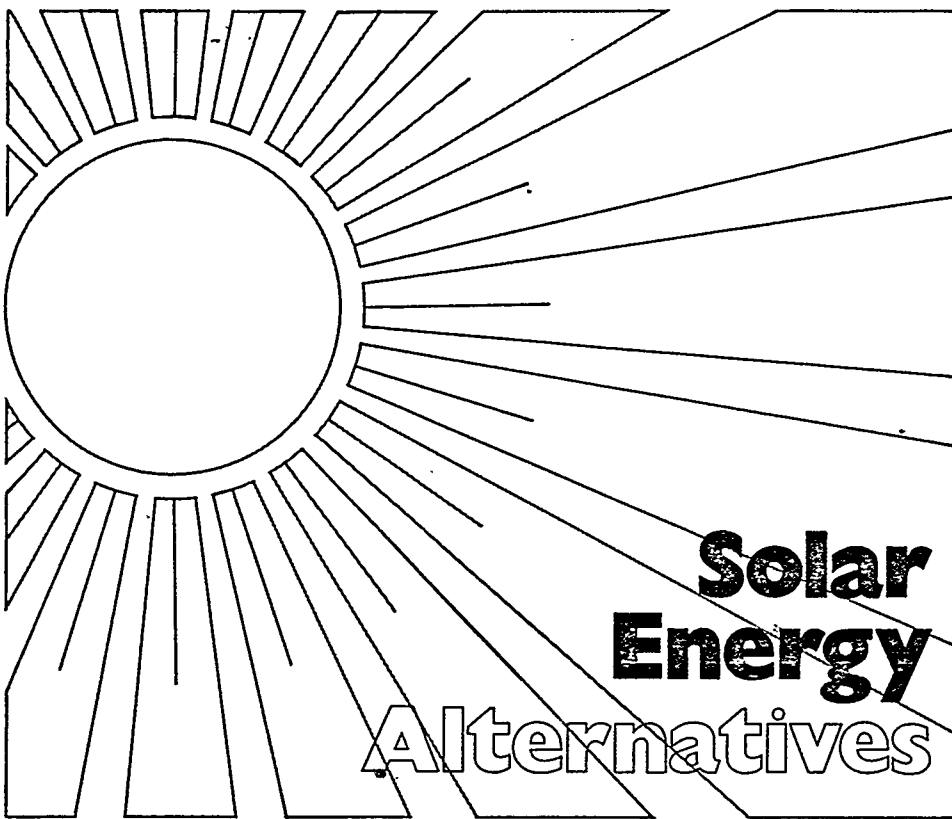
"There are a lot of people who want to close down parts of the core area of Davis (and create a downtown shopping mall). (This would help efforts to lower the energy used by automobiles in Davis. However, this must be balanced against the possible loss of business to downtown merchants.)"

WOULD BREAKING UP THE CITY INTO MANY SMALLER AREAS (NEIGHBORHOODS) WITH LOCAL SHOPPING HELP CONSERVE ENERGY?

"I've always thought that was a good idea, to break up city government into more neighborhoods. I think that's the way to go in the future. (It would be important in promoting more energy efficient walking and bicycling for local trips and shopping although, even today, up to 25 per cent of all trips in Davis are by bicycle.)"

Bill Cunningham





Solar energy for use in water heating and space conditioning is becoming an economically viable energy source. As conventional energy costs rise, the time necessary for solar users to recoup their investment through fuel savings is decreased. Federal government deregulation of fuel prices would also help promote conservation and allow solar energy systems to more economically compete in the new and retrofit housing market. This article examines two very different methods to facilitate implementation of readily available solar technologies.

There are two main approaches to heating living space with the sun: the active and the passive method. The active solar system uses flat-plate solar collectors and a variety of ventilation systems to supply from 60 to 90 per cent of the required heat. The additional heat is supplied by conventional auxiliary energy sources. In this traditional flat-plate solar collection method, a fluid (usually water) runs in a loop from a storage tank through canals on the solar collector's insulated blackened back metal plate. Sunlight reaches the plate through a transparent cover which also prevents the escape of reflected solar energy. By 1930, thousands of central California farmers were heating their domestic water supply by this method. In the Miami, Florida area, over 50,000 flat-plate solar collectors for water heating purposes were installed from 1924 to 1939.

The passive solar system uses water enclosed in black vinyl bags on the roof or in steel drums inside a south-facing window, each with movable insulation panels. Removal of the panels during the day exposes the enclosed water to the winter sun for heating. In the summer, the process is reversed to allow the cool night air to absorb the water's heat. This passive method provides both heating and cooling. The water remains in the comfort range from 60 to 85 degrees F. in order to maintain an equilibrium temperature of 68 to 76 degrees F. within the structure.

If sunlight is an available source of energy for space and water heating, what has prevented its implementation for residential use? The answer lies in the initial high cost to buy and to install a solar energy system which often is double or triple the cost of conventional electric or fossil fuel systems. At present when a loan is necessary to finance a solar system, the interest on the loan often exceeds the

reduction in fuel bills and thus discourages residential use.

Two methods have been proposed for financing solar systems. One proposal relies on public financing and manufacturers. The biennial plan released March 2, 1977, recommends that low interest loans be given to solar users. A solar water heater will pay for itself if the user currently offers a 10 per cent tax credit for the system.

An alternative proposal, suggested by utility companies buying solar collectors and installing them on apartments and homes, involves charging the cost of the systems to customers and charging the utility companies according to the energy consumed each month. The enactment of AB 4032 by the Legislature provides an incentive for utility companies to enter the solar energy market by offering a 1/2 to 1% higher rate of return on solar energy.

Legislative policy decisions regarding the management of energy shortages. The present incentives to private individuals and businesses to develop a solar energy economy or (2) maintain the ownership, distribution, and maintenance of solar energy concentrated in our utility companies.

Solar-User Incentive

Federal Government

The rapid development of appropriate policy initiatives to provide strong incentives to manufacturers. Establishment of solar energy production would encourage independence from fossil fuels. Federal income tax credits for solar businesses would stimulate rapid development. The federal government could give direct subsidies to cover the system's initial cost or by offering low interest loans to energy producers so do not receive tax credits. A reverse depletion allowance could be paid for by an alternative energy source.

Two bills which would have provided incentives for solar energy died in the closing months of the 95th Congress will certainly be reconsidered during the previous sessions.

State Government

In contrast to the federal situation, there is a need to spur solar development by providing incentives. The following list illustrates the diversity of solar space and water conditioning technologies.

Income Tax Incentives - Income tax credits for solar system cost by allowing either a credit or a deduction from a business' state income tax. Similarly, alternative forms of income tax in

Arizona in H.B. 2067 (1976) allows a 36-per cent credit for solar energy systems. California (1976) allows a 10 per cent credit, up to 30 per cent deduction for the first year, and a 30 per cent deduction for the second year, and a three-year, with a maximum of \$500 a

reduction in fuel bills and thus discourages investment in solar energy for residential use.

Two methods have been proposed to overcome the high initial cost barrier of solar systems. One proposal relies on giving tax incentives directly to solar users and manufacturers. The biennial plan of the California Energy Commission, released March 2, 1977, recommends that tax credits up to 50 per cent and that low interest loans be given to solar users. Such an incentive would guarantee that a solar water heater will pay for itself in gas savings within five years. California currently offers a 10 per cent tax credit, with a \$1000 refund on a \$10,000 solar system.

An alternative proposal, suggested by the Southern California Gas Company, envisions utility companies buying solar water heaters from manufacturers and installing them on apartments and homes. The utility company would lease the systems to customers and charge them either a fixed monthly rate or a rate corresponding to the energy consumed by a conventional system during the month. The enactment of AB 4032 by the 1976 California legislature created an incentive for utility companies to enter the solar energy field. This bill allows the utility company a ½ to 1% higher rate of return on experimental projects using solar energy.

Legislative policy decisions regarding solar energy are very important in this age of energy shortages. The present choice is between (1) providing financial incentives to private individuals and businesses and establishing a decentralized solar energy economy or (2) maintaining the present economy in which the ownership, distribution, and maintenance of all energy supply systems remains concentrated in our utility companies.

Solar-User Incentives and Policy Initiatives

Federal Government

The rapid development of appropriate solar technologies depends on public policy initiatives to provide strong financial incentives for solar users and manufacturers. Establishment of solar-user incentives by the federal government would encourage independence from foreign sources of fossil fuels and uranium. Federal income tax credits for solar users and investment tax credits to solar businesses would stimulate rapid solar system dissemination. Alternatively, the federal government could give direct subsidies, either by paying part of the system's initial cost or by offering low interest loans. Solar users are not treated as energy producers so do not receive the tax advantages allowed utility and oil companies. A reverse depletion allowance permitting solar users to obtain tax credits for the fuel they no longer require could equalize the subsidy levels and could be paid for by an alternative energy tax levied on depletion and polluting energy sources.

Two bills which would have provided federal tax incentives for expanded use of solar energy died in the closing moments of the 94th Congress. However, the 95th Congress will certainly reconsider the solar legislation that failed to pass during the previous sessions.

State Government

In contrast to the federal situation, ten states in 1976 passed measures which will spur solar development by providing immediate tax incentives to solar users. The following list illustrates the diversity of state efforts geared toward stimulation of solar space and water conditioning technologies.

Income Tax Incentives - Income tax incentives refund a portion of the initial solar system cost by allowing either a credit or a deduction on an individual's or a business' state income tax. Similarly, allowing amortization of the system's value is an alternative form of income tax incentive.

Arizona in H.B. 2067 (1976) allows 36-month amortization; *California* in S.B. 218 (1976) allows a 10 per cent credit, up to \$1000; *Idaho* in H.B. 468 (1976) allows a 40 per cent deduction for the first year, and a 20 per cent deduction during the next three years, with a maximum of \$500 a year.

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1975; *Idaho* in H.B. 468 (1976) allows a 40
per cent deduction during the next
year.

Life Cycle Cost Analysis - This requires builders of new or remodeled, state-
financed facilities to compare capital, operational, and maintenance costs
between solar and conventional heating and cooling systems.
Washington in S.B. 2105 (1975) requires life cycle cost analysis for public facilities
of 25,000 ft squared or more; *California's* life cycle cost analysis bill, S.B. 215
(1976), was vetoed by Governor Brown.

Property Tax Incentives - Property tax incentives reduce the assessed valuation
of solar systems and insure that property taxes are not increased.
Arizona - Public Law 165 (1974); *Colorado* - S.B. 75 (1975); *Oregon* - H.B. 2202
(1975).

Sales Tax Exemptions - Sales tax exemptions eliminate the sales tax on solar
systems and thereby reduce the initial capital costs. *Georgia* - H.B. 1480 (1976);
Michigan - H.B. 4137 (1976).

Solar Provisions in Building Codes

California in A.B. 2740 (1976) allows cities and counties to require new buildings
to be constructed in such a way that solar equipment may be installed at a later
time.

Solar Rights Law

Oregon in H.B. 2036 (1975) provides that access to incident sunlight be
considered as a part of comprehensive planning, zoning, and land ordinances. It
also allows localities to protect access to the sun through height limitations.
Colorado in S.B. 95 (1975) provides the legislative recognition necessary to give
solar easements legal standing. The law requires that the solar easement be
subject to the same conveyance and recording requirements as other easements.

Local Governments

Local governments can stimulate solar utilization by imposing land use controls
such as height limitations, structural orientation requirements, and performance
standards on all new buildings. Such revisions in existing building codes have
been recommended in the Uniform Solar Energy Code adopted in 1976 by the
International Association of Plumbers and Mechanical Officials. Its goal is to have
this model code incorporated into local statutes to insure that conversion of non-
solar buildings to solar energy will be feasible and inexpensive in the future.

The City of Davis, in Yolo county - a community noted for its pioneering use of
solar energy - has enacted an Energy Conservation and Solar Utilization
Ordinance. Performance standards for all new housing, window size and
orientation, insulation standards, heat loss and gain limitations, and shading
restrictions are all elements of this far-reaching code. Other proposed
ordinances for Davis provide for solar-heated swimming pools and solar
easements. The latter will guarantee access to the solar radiation free and clear of
potential obstructions on contiguous property.

Opposition To User Incentives

One argument against governmental subsidies for solar users suggests that only
the rich would be benefited. Lower income groups that pay for these subsidies in
their tax dollars can not afford additions on their homes. However, utility
proposals may actually benefit low income apartment dwellers since solar water
heating on these multi-unit complexes may be the first application of widespread
solar technology to provide reduced rates for its users. Also, tax incentives may
tend to overburden the already complex tax system. For example, computing a
tax credit relative to the amount of fuel saved would be difficult since taxpayers
would have to maintain records of past consumption and present auxiliary energy
needed for cloudy periods. It would also result in inequitable application since
residents of milder climates would benefit less than residents of areas in which
winters are more severe and energy use higher.

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Solar Energy

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Utility Company Lease/Service Schemes

Public and Private Utilities

The utility funded Electric Power Research Institute of Palo Alto, California, reported on January 28, 1977, that in 1976, American utility companies doubled their 1975 expenditures into applications of solar energy. In northern California, where utility peak load requirements are supplied primarily by expensive oil-fired or dwindling hydroelectric facilities, solar energy offers a unique opportunity to ameliorate the need for future peak-load generating facilities. In 1976, Pacific Gas and Electric Company sponsored three homes equipped with active solar systems. It also established a solar testing and instructional facility, supplied data on sunlight for northern California, and conducted research in the industrial and agricultural applications of solar energy. The Southern California Gas Company has spent over \$500,000 in an effort to determine the feasibility of leasing solar water heating systems to residents of multi-unit apartment complexes. They have requested a \$10.8 million rate increase to finance the installation of 314 solar systems.

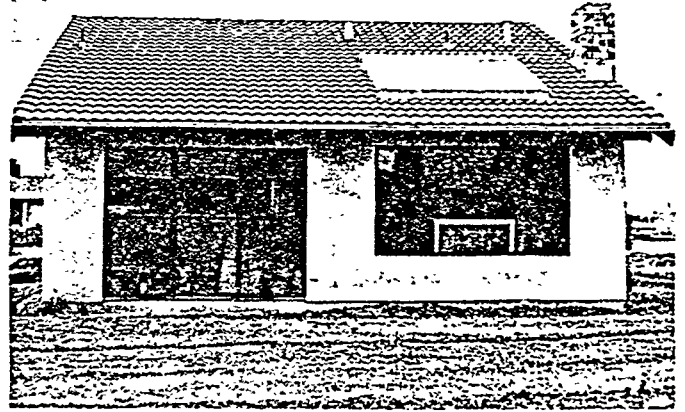
Municipal Utilities

Local governments, such as the city of Santa Clara, have begun to equip buildings with solar heating and hot water systems. Santa Clara has started the first non-profit municipal solar utility district and maintains solar systems for municipal as well as 26 private swimming pools, five solar heated houses and a solar heated and cooled community center. According to city manager, Donald Von Raesfeld, "Customers pay a monthly fee to cover amortization of the solar units with the capital raised through municipal bonds and partially matched federal funding."

Municipal utilities unwilling to invest their own capital might also look to private solar companies for financial assistance. In Ocala, Florida, Wilcon Incorporated (a private company) is attempting the following arrangement with the municipal utility. Wilcon installs domestic solar water heating systems at no cost and maintains the systems free of charge. The customer is charged only 75% of the equivalent electricity cost for the energy going into the water heater. This 25% reduction can be most effective in attracting solar users. The city receives part of the payment for its services and as compensation for its loss of revenues. After five years, the customer's charge drops to 50%, and after 10 years, the customer can purchase the system for \$1.

Opposition To Utility Schemes

Opponents fear that public and private utilities will seek to control solar installation through tight regulations imposed by the California Public Utility Commission. These regulations would be similar to telephone and cable television hookup restrictions placed on consumers.



One of the many new homes in Stonegate Village, Davis, CA, having a solar water heating panel.

Such regulations would prohibit individuals from equipping their living space with any energy-producing device which relies on utility company auxiliary power. Opponents to the municipal utility proposals point to the high administrative costs and inefficiency that may accompany government business ventures. Also taxpayers may pay twice, once through normal taxation and again in monthly rental payments. Furthermore, private and public utilities maintain that subsidizing local government without similar subsidies to private enterprise is unfair. The utility proposals all utilize active solar energy systems and may discourage small solar businesses which specialize in the more innovative passive solar energy systems.

Latest Update

The Energy Research and Development Administration's latest report on solar energy states that solar space and water heating systems are currently cheaper than electricity almost everywhere in the United States. Additional solar user incentives would allow individuals and businesses to reduce capital expenditures and lower their demand on non-renewable energy resources. Solar users who wish the security of their own power supply would feel as though they are taking a leadership role in society.

In Congressional hearings on February 24, 1977, a team funded by the National Science Foundation and headed by Dr. Steven Feldman, visiting professor of Public Policy at U.C. Berkeley, testified on the effects of solar energy on the Sacramento Municipal Utility District (SMUD). The study suggested that solar collectors on homes in Sacramento could act as a valuable substitute for diminishing hydroelectric peak load generating capacity. It concluded that SMUD was a more favorable utility for substituting peak capacity with solar systems than any other utility studied. The report also proposed the optimum utility situation might be achieved through a closely regulated competition between the utility and private solar companies.



Dow Chemical withdraws from Delta

(continued from page 1)

A second major legislative proposal in response to Dow's abandonment of their Delta project is a bill introduced by Senator Paul Carpenter (SB 211). It would require persons bringing an action against a public agency to overturn a decision for noncompliance with the California Environmental Quality Act (CEQA) to post a bond to cover possible costs incurred from the delay to a project caused by the litigation. This bill, if passed, would probably preclude a lawsuit such as the one brought against Solano County by the Sierra Club, attacking its approval of the Dow facility.

The Sierra Club alleged that the Environmental Impact Report was inadequate and that the tripartite relationship between Dow, the county, and J.B. Gilbert and Associates violated section 21100 of CEQA. Gilbert was the consulting firm that prepared the draft EIR and, according to the Sierra Club allegation, was under contract to Dow and not to the county, as CEQA requires. The Sierra Club apparently considered the precise contractual relationship to be a key issue as it reflected on the objectivity of the EIR. Dow protracted the litigation by contesting a subpoena of Gilbert's records.

The case was not confined to alleged violations of CEQA, however. The Sierra Club claimed that Solano County proceeded illegally in cancelling the Williamson Act contract on the McOmie ranch (the site of the proposed facility), which would have required the land to remain in agriculture for several more years.

Had Carpenter's bill been passed two years ago, it is likely that groups like the Sierra Club would never have been able to contest the Dow petrochemical complex. The proposal is clearly responsive to the feeling among some business people in California that environmentalists can successfully delay any industrial development with CEQA litigation, whether meritorious or frivolous.

There is a degree of truth to that - in fact, the success of much environmental litigation lies precisely in the ability to delay projects until they are ultimately abandoned.

Environmentalists argue, however, that the Dow plant was a perfect illustration of the need for vigorous enforcement of laws to protect the environment. The Air Resources Board estimated that one of the proposed plants would have exceeded air quality standards by nine times for hydrocarbon emissions, by twenty-five times for nitrogen oxides, and by sixty-three times for sulfur oxides.

A critical permit to build the styrene unit of the complex was denied by the Bay Area Air Pollution Control District because ambient air quality standards (maximum allowable levels of pollutants pursuant to the federal Clean Air Act Amendments of 1972) are already being exceeded in the area.

Finally, the event which may have immediately precipitated the Dow pullout was the decision by five state agencies, upon advice of the Attorney General's office, to supplement an inadequate EIR through the formal CEQA agency review process. This decision, made at multi-agency hearings in December, clearly spelled further costly delay for Dow.

Literature review:

February's *Sierra Club Bulletin*, in "Legislative Scoreboard," tallies the fate of legislation in the 94th Congress related to public lands, energy, pollution, wilderness protection, and other issues. Also, "The Club, the Cause, and the Courts" catalogs the 1976 activities of its Legal Defense Fund, including litigation concerning coal mining and air quality nondeterioration.

If you are interested in nuclear power, the December 1976 issue of *Scientific American* presents an interesting, though occasionally technical, discussion of "The Reprocessing of Nuclear Fuels."

Two Cornell law students conducted a case study of attempts at state-level land use controls in Colorado and Vermont. They discuss their results in "Development Pains" in the January/February issue of *Environment*. For recycling advocates, the December issue has an article on "Profit in Bottle Laws."

Too lazy to read the Council on Environmental Quality's annual report on the state of the environment? The December 1976 *Environmental Law Reporter* (6ELR 10278-80) has a brief (two pages) summary of what it did and did not say in "CEQ Issues Less Ambitious Seventh Annual Report."

The Carter Administration's strip mining policy is featured in "Carter Favors Strip Mine Controls and Wants State to Enforce Them," *Environment Reporter* 1545 (February 11, 1977). Charles Warren, newly appointed head of CEQ, is profiled in the March 4 issue in "Charles Warren, Carter Choice to Chair CEQ, Expected to be Tough on Environment, Make Industry Prove its Case." Included are some Californians' views on Warren, and his views on his new role.

Elliott Gilberg

Lessons from Dow

Clearly, there are lessons to be learned on both sides from the Dow experience. Presently the permit process is burdensome, and even if it is designed to serve goals of environmental protection, it fosters long periods of uncertainty which business investors must find unattractive.

Additionally, nearly one of every twelve members of the labor force in the state remain unemployed, a concern which must be shared by business people and environmentalists alike.

On the other hand, California has been a leader in legislation to protect the natural environment, and when used properly these laws can effectively prevent particularly offensive sources of pollution from damaging an ecologically sensitive area.

The welfare of the people of California will be better served by attracting industry that is labor-intensive and does not pose the societal costs inherent in pollution.

Elliott Gilberg and Greg Klipfel



calendar

may

SACRAMENTO COUNTY

May 2,4,9,11,16,18,23,25,30
Sacramento County Board of Supervisors
826 Seventh Street, Room 424, Sacramento
5:45 p.m.

May 3,10,17,24,31
Sacramento County Planning Commission
Policy Division
827 Seventh Street, Room 424, Sacramento
5:30 p.m.

May 12,26
City of Sacramento Planning Commission
City Council Chambers
City Hall, Sacramento
5:15 p.m.

Special Events

Sacramento County Board of Supervisors
"Modification of the Zoning Code of Sacramento
County"
Agenda: May 11 at 2:00 p.m.

Sacramento County Planning Commission
"Energy Conservation Residential Building Code"
Public Hearing, May 24, 1977 at 5:30 p.m.

Governor's Commission to Review California Water
Rights Project
P.O. Box 100, Sacramento CA 95801
The Commission will be reviewing all aspects of water
resources management and will compile a report which
will include recommended legislation.
The public is encouraged to participate in the Com-
mission's work.

YOLO COUNTY

May 3,10,17,24,31
Yolo County Board of Supervisors
9:00 a.m.
Meeting Agendas available one week in advance from
Board of Supervisors Clerk

May 4,11,18,25
Yolo Planning Commission

Woodland Area General Planning Advisory Commission
(WAGPAC)
Woodland High School, Room 902, Woodland
7:30 p.m.
Meeting Agendad available one week in advance.

May 4,11,18,25
City of Davis City Council
City Hall, Davis
7:30 p.m.
Meeting Agendas and Staff Reports available one week
in advance from Planning Department

May 10
City of Davis Planning Commission
City Council Chambers
City Hall, 226 F Street, Davis
7:30 p.m.
Meeeting Agendas and Staff Reports available one week
in advance from Planning Department

SOLANO COUNTY

May 3,10,17,24,31
Solano County Board of Supervisors
Fairfield Courthouse, Fairfield
9:00 p.m.

May 5,19
Solano County Planning Commission
Fairfield Courthouse, Fairfield
8:00 p.m.

Laguna Creek Study Area

(continued from page 3)

Additionally, it is not clear whether the net impact on the environment is a positive one. Without question, the proposals are designed to make optimal use of the region's natural features. This is unlike conventional zoning which makes land-use decisions based on other considerations and then reviews the environmental impact.

But planned unit developments, normally designed to eliminate urban sprawl, may actually accelerate such tendencies. According to Sternlieb, Burchell and Hughes, writing for *Environmental Affairs*, the massive infusion of residential populations over a short period of time may generate such traffic volumes that commercial strip development is spawned along the primary roadways. As ECOS pointed out, the increased air pollution created by greater travel distances may offset other environmental advantages. Ultimately, the urban fringe will expand to a point where development is mandatory. Until that time, they contend, unwarranted pollution should be restrained.

In summary, Laguna Creek represents a sound attempt to avoid the detrimental impact of piecemeal planning efforts. The County's phasing is an effort to avoid leapfrog development with its attendant fiscal and environmental costs.

Given the fiscal restraints and procedural delays which face the large landowner/developer, projects of this magnitude may ultimately prove difficult to carry through. Rather, intensive preplanning may serve the community because it establishes at the very least theoretical guidelines based on sound land-use concepts.

Dee Hartzog



pending legislation:

(continued from page 4)

AB 527 Wornum) Requires all suppliers of water to effect a 24 percent reduction in water consumption during the 1977 year.

AB 524 (Lewis) Requires regional water quality control boards to establish standards of quality for each beneficial use of water. Before the regional board can specify certain areas or conditions where the discharge of waste will not be permitted, it will be required to have positive evidence that these standards are being violated.

Marcia Todhunter



“comments”

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