

CONSERVATION OF MAN'S TOTAL ENVIRONMENT

I am pleased to be here. It took me fifty years to finally get into all fifty States. I actually saved the greatest one for this occasion. It's a matter of gradually working up to the challenge of America's last frontier. The \$7,200,000 President Johnson paid Russia in 1867 stands as one of the great decisions of all time. *(with say for your license)*

In 1873, Horace (William Shaler) Cleveland, author of Landscape Architecture--As Applied to the Wants of the West had this to say:

"The opening of the lines of railroad across the continent has developed so much that was unexpected in the resources and capacities of the regions they have penetrated; has dispelled so many erroneous ideas in regard to their susceptibility of improvement for the purposes of civilized habitation, and has so facilitated the means of adapting them to such purposes, that it has become a task of almost equal difficulty to obtain a realizing sense of the opportunities which are dawning upon us, or of the responsibilities they involve."

That sentence is a mouthful, but nearly a century ago this perceptive person was pointing out that the vast regions yet lying undisturbed. . . comprise such resources of wealth and variety. . . of natural scenery as can be seen on no other portion of the earth's surface. This is the raw material which is placed in our hands to be molded into shape for the habitations of a nation, and such as we create, it must essentially remain for all future time.

Now as we soon enter another decade of the seventies, it is almost as if citizen Cleveland was writing about Alaska today--and for the future.

Material used by Norman A. Berg, Deputy Administrator for Field Services, Soil Conservation Service, U. S. Department of Agriculture, Washington, D. C., at the Third Annual Meeting of the Alaska Association of Soil Conservation Sub-Districts, Travelers Inn, Fairbanks, Alaska, November 7, 1968

For if Alaska is to develop to its full potential and avoid many costly mistakes which were made in other sections of the U. S. during the early developmental years, the agencies of the Federal and State government concerned with conservation and development of land will need to work in close harmony to provide the combined team effort needed to assist homesteaders, farmers, and others.

SCS operations were started in Alaska on February 8, 1938, although a conservation survey was begun in 1939 based largely on the findings of the H. H. Bennett surveys in 1914 and 1916, Alaska is still in every sense of the word--a developing State.

The greatest role of soil conservation ^{sub - all USDA agencies} districts, SCS, and others has been and should continue to be one of assistance in the orderly development of the State. Never again, will this Nation have the opportunity that Alaska affords for the orderly development, conservation, and use of the total environment. Programs of soil conservation ^{sub} districts and SCS ^{USDA} are basic elements in this resource conservation and development work.

^{my Service,} We in SCS find ourselves in the unique position of providing valuable program help in the largest of the fifty States with ^{one of} the smallest ^{best} State staff in the Service.

^{Nationally} As we look ahead it is ^{good} to know that recent projections of the Nation's gross national product is over \$850 billion for 1968 and over a trillion dollars in 1971. However, George Stewart's new book, "Not So Rich as You Think," had these lines:

"When some future historian sits down to summarize what the present generation of Americans has accomplished, his climatic sentence could read: 'Of the waters, they made a cesspool; of the air, a depository of poisons, and of the good earth itself, a dump. . .'"

So what would be still ^{better} niger to know about our gross national product for instance is, "will the Nation be better off or worse off as a result of growth?" Present aggregate tabulations of "product" are color blind. Somewhere, someone today is probably spending ^{at least} \$20 million to create a resource mess that someday we'll have to spend at least \$20 million to correct. Both are now considered goods and services (GNP)--the only test being that someone paid the bill ^{each time}.

A facetious remark would be that when the U. S. has ^{that} an annual trillion dollar gross national product, it may have to spend most of it to return the environment to that quality level found when the U. S. was new--and had no gross national product.

Too harsh--perhaps so. But I am concerned that future generations will judge most harshly a race of men that had all the technical knowledge, all the resources they needed to provide clean water, air and land, but lacked the will to do so.

If we let that happen, then they will so judge us.

As the Secretary of Agriculture points out at every opportunity:

"It is no secret that we are facing an environmental crisis. It affects every one of the basic elements of the biosphere--air, earth and water, and every one of us."

In the Nation's capitol projections on what America will look like at the turn of the century ^{are} a favorite pastime.

Dave Bean

The image ^{developed} is the megalopolis--regions crowded with cities and towns--with tens of millions of people seeking food, clean air and water. . . ^{recreation} and housing.

In 1960, 100 million Americans--56 percent of the population--^{did} lived in five great urban regions and 11 smaller regions. This concentration took up 7 percent of the land in the District of Columbia and the lower 48 States.

By the year 2000, the prediction is that the five great regions will merge into three giant belts while the 11 smaller regions will become 19 large urban areas and great cities. Here 239 million Americans ^{would} live--^{country to} about 77 percent of the Nation on about 11 percent of the land. The total percentage of Americans living in any kind of an urbanized area will be about 85 percent at that time.

The strain this will put on natural resources of the ^{se} areas will be tremendous. And the planning and careful regulation of these areas--in natural resources, in sociological problems, industrial development and housing will hold the key to whether this population shift creates a wholesome society or a monster which will destroy itself.

In contrast, the U. S. Department of Agriculture's Communities of Tomorrow statement ^{envisions} an American landscape dotted with communities that include a blend of renewed small cities, new towns, and growing rural villages.

Each to be a cluster with its own jobs and industries, its own educational, medical, cultural, and recreational centers, and with an agriculture fully sharing in the national prosperity. Hundreds of viable ^{areas}

communities could make it possible for 300 million citizens to live in less congestion than 200 million live today.

Therefore, I feel that this is the time to speak for the unity of the city and the countryside for all values and uses. It is the time to advocate the protection and development of our resources as a whole, in accordance with their capabilities and the goals of the community. It is a time to speak for action that will meet the oncoming demands of a growing Nation.

Above all, it is a time to help conservation district ^{or sub-district} governing boards to assume fully their responsibilities of local leadership in soil, in water, and in related conservation and resource development work.

The key, as always, is people, and their desire, urge, or will to achieve. Psychologists tell us most people in this world can be divided into two broad groups. There is first that minority challenged by opportunity and willing to work hard to achieve something. Second, is the majority who really do not care that much. Therefore, ^{you} must help the Nation see that rural America's problems are the Nation's problems. ^{we} you must help the Nation see that public programs, which may be easier to apply in large urban centers, nevertheless must be brought also to the countryside.

We need to tell the soil and water resources story to many new people. We need to be more specific about the benefits of soil and water conservation efforts to all people and their institutions.

We need (1) to reach new audiences, including people who live in towns and cities, with material designed to interest them, and (2) to reach our traditional audience with fresh material reflecting current areas of emphasis such as pollution, how watershed work helps develop communities, RC&D project benefits, surface-mining rehabilitation, improving the economic status of small farmers, and rural job opportunities.

Everything possible is needed to make soil and water conservation as meaningful to the families who live in our towns and cities as it is to those who live in rural America.

How many citizens, for instance, know that conservation is a national goal demanding assurance that the Nation's natural resources are in a condition to support the economic and social needs of society for all future time.

- Broad
National
goal*
- Its objective is the dignity of man's spirit and his welfare,
 - Its concern is with the total relationship between man and the environment around him,
 - It recognizes that conservation values extend throughout the entire fabric of human aspirations,
 - It demands a creative conservation of selective use, protection, development, restoration and innovation, and
 - It takes the future into consideration and recognizes that society's long-term interests may be jeopardized by seemingly rational short-term objectives.

As we develop momentum in this work, in league with many others, we ^{also} can work together to help fill rural America with viable, liveable communities.

Our goal is a rural America where people can remain, or populations lost can return, and find the opportunities, the amenities of life as it can now be lived under the best American standards.

This is a formidable goal, and our effort is a pioneering effort. It brings us together from various disciplines into a common front against forces of defeat.

> What will the resource conservationist contribute?

USDA (and SCS) conservation programs and policies are formulated and carried out with the intent of optimizing the contributions of natural resources to all potential uses present and future. They are programs that lead to a planned management of natural resources so as to prevent exploitation, destruction, and neglect. Conservation programs have built-in features for accommodating dynamic change because society places severe stresses and strains on the natural environment that supports its culture. As a consequence, USDA Resources in Action programs are designed to recognize that:

--Man is unique in his ability to alter the environment in which he lives.

--Man's intervention in natural resource systems can be radically disruptive. Application of new technology not adequately supported by conservation investment degrades the ecological environment. The social costs are great.

--Man must learn more about the real alternatives available to him in his exploitation of natural resources.

This challenge to future conservationists suggests that we will do more:

- community-wide, multi-~~borough~~, project-type, long range resource planning,
- erosion control on farm and non-farm lands, roadsides and streambanks,
- restoration of surface mined areas,
- protection and development of water resources,
- improvement of fish and wildlife habitat,
- reduction of air pollution from wind erosion and smoke,
- control of streamflow by improvement of infiltration of water into and through the soil profile thereby providing lower flows in the peak season and higher flows in the dry seasons,
- improvement of ecological environments to support man's culture and economic well-being by decreasing the ill effects caused by uncontrolled flooding,
- upgrading of water quality by reduction of sediments and other pollutants,
- creating and preserving natural beauty by providing for harmonious use patterns and blending uses into the natural landscape,
- outdoor recreational development by creating opportunities from the agricultural resource and from the off-site lands and waters that crop, pasture, and range land conservation systems enhance,
- resource work for economic activity in rural areas thereby stemming the migration of people to urban centers,
- to assure the availability of land and water to satisfy ^{all} human needs,
- improving of conservation training in schools and youth organizations by helping professional educators strengthen this work,
- work with all types of organizations and groups to help them improve their own conservation and education activities, and
- improving of the quality of the environment in whatever way resource conservation can contribute.

*We will
also do more*

In summary

The national goal of conservation will increasingly require the installation and operation of (conservation systems) of crop, pasture, range, and forest lands which produce multiple joint outputs as well as creating natural resource conditions that will support a viable and sustained agricultural industry as one of the major objectives.

> It seems clear to me, therefore, that certain fundamentals will have increasingly high priority.

First, this Nation must continue to sustain the most productive and efficient agriculture in the world. Conservation procedures and techniques must be modernized and accelerated to protect and fully develop the crop-land and forest production base through soil and water conservation.

Second, this Nation must protect and improve its water quality and supplies through better land management.

Third, this Nation must do a better job of solving land-use problems in areas of population growth, especially the rural-urban fringe areas.

Fourth, this Nation needs a more balanced pattern of national growth. This requires that rural America must become a better place in which to live and work and play and educate coming generations. How to do it?

The answers are simple; the execution is difficult.

We must become involved in resource planning and development at all levels, from the individual tract of land to multi-ownership regions. This means developing working relations, through conservation districts, to help small communities, towns, cities, and multi-county ^{regions} planning areas.

A look ahead at program planning and evaluation suggests we ^{will} need to do better in measuring what conservation means. A special challenge faces ^{us} (the Service) on two fronts. First, we must make sure the full array of social, economic, and environmental benefits from soil and water conservation accomplishments are measured and made more meaningful to those governmental and private institutions who make financial resources available (to the Service and others) for conservation and resource development. We must tell what conservation is doing for everyone.

Second, we should help those we assist in planning to make wise conservation investment decisions. We need to make certain that our own investments in conservation planning and installation services represent intelligent decisions. More of our Service resources are being committed each year to assisting others with regional, State, community, project, and group conservation activities. This area-wide activity broadens the scope and complexity of the soil and water conservation program. ^{The end} The result can be conservation accomplishments which make for greater contributions to social, economic, and environmental objectives--more public benefits to more people. (On the other hand, opportunities are also ^{still} present for dissipating our Service resources on conservation activities which may not pay off so well in public benefits. ^{Therefore,} We need to carefully sort out, measure, and make meaningful the benefits to be realized.

We are now looking at Service work for possible impacts on the quality of the environment. Specifically, we must learn about the possible alternatives for disposal of feedlot and poultry wastes, crop-processing wastes, domestic sewage, garbage, and refuse. We need to know both the utility and the limitations of lagoons, landfills, septic tanks, infiltration ditches, and spray systems for treatment of a variety of wastes.

We should use every opportunity, where feasible, to promote putting organic wastes back on the land where they originated. Can we convert potential environmental pollutants back to production and use, and if possible, show a profit by doing it?

➤ Sediment as a pollutant is finally attracting more attention. We must obtain and provide more information about the value of our programs to reduce sediment.

Although sewage and industrial wastes are heavy contributors to the pollution problem, sediments from eroding land are the main burden of pollutants in surface waters. Suspended solids from farms, roads, stream-banks, surface-mined areas, urban development, and similar sources amount to 700 times the loadings caused by sewage discharge. Sediment is not only a pollutant, it also carries other pollutants along with it--such as organic wastes and inorganic chemicals and infectious agents.

Aside from clogging our streams and reservoirs, a large sediment load will detract from recreational uses, reduce fish and shellfish populations, and impair the oxidation of organic pollutants. In addition, sediment greatly increases the cost of treating water for municipal and industrial uses and damages power turbines and pumping equipment.

Every year as much as 4 billion tons of sediment reach our waterways. That's tantamount to stripping the topsoil from about 4 million acres of land.

More than a billion cubic yards of water-carried sediment settles into our reservoirs each year, robbing us of space for storing water to satisfy the daily thirst of 5 million people.

Although it may be assumed that 3/4 of the sediment that reaches our streams comes from agricultural, forest, and range lands, construction in developing urban areas is also a heavy contributor.

Sediment is a product of soil erosion. Soil and water conservation districts have a clear cut charter in this area. They can help to:

1. accelerate erosion control on the private lands not yet adequately treated,
2. provide technical assistance and guidelines to counties and municipalities in soil interpretations, site selection and erosion control during construction activities, and
3. work with local officials and individual landowners to attach erosion problems on critical sediment source areas such as roadbanks, streambanks, and old strip mine areas.

In retrospect, I think we conservationists take too narrow a view of our mission. We see ourselves as technicians rather than as agents of social and economic change. We talk about interrelationships--of soil, water, forests, and wildlife in conjunction with its habitat. But environment is more than physical properties. Resource management must include physical, aesthetic and psychological relationships. We need to think beyond what is "good land practice," "sound water management," and other conservation concerns from a strictly technical viewpoint, and consider how all this fits into man's relation to the total environment.

We know a great deal about soil and water management--and we are always learning more. Now we must also learn more about basic resource relationships--including human resources--and be prepared to apply what we have learned.

We must become ^{more} people oriented. We must relate our efforts and accomplishments to the needs of the individual in our society. We must not get so bogged down with the technological angle that we ignore the human angle. Technology is important only when it serves a human need.

RCZ Administrator Williams believes we are also coming to a time when there must be a national program and national standards of performance in land development. He does not mean that this should be or can be a Federal program with Federal standards. These issues are for the States and local governments to work out. Only when the general public and State and local leaders recognize the essential need for protecting their natural resources and developing them wisely--for their own long-term benefit--can the necessary programs and standards come into being. Some States and communities are making progress in meeting these needs, but the problems they are encountering attest to the magnitude of the challenge.

There is plenty of land available for the Nation's growth--but the question is what land for what purpose.

The voice of the resource conservationist must be heard in arriving at this decision. As a basic need, land owners and developers must conform to reasonable and effective standards of site selection and site development. To guide this development, it is imperative that soil surveys be completed as rapidly as possible ^{specially} in critical areas of rapidly changing land use. More State and local government ^{help} is essential to get this done. We all have vital mission to perform in this broad conservation field.

We must ^{also} continually redefine our roles and goals as resource conservationists.

170.14

More needs to be done at the national level, both by private organizations and by public bodies. But the outlook for more Federal funding in soil and water conservation is not bright at this time. We are facing cutbacks, as you know, and, if the slack is to be taken up, as it must be, financial support must come from the State and local jurisdictions.

We've got to remain as flexible in our approach as circumstances require. Our primary aim must always be to extend the benefits of sound conservation policy and practice as effectively as we can.

We must develop a national vision that is a rational alternative to urban congestion and suburban sprawl. We must have a workable scheme that will assure ample opportunity in the countryside for everyone who chooses to live and work in such an environment.

(There are other problems afflicting the country now--other challenges, other needs, new priorities, *new leadership?*

You know that success and fame are fleeting. What would have sufficed yesterday is apt to be too little--too late for tomorrow. The past is history. Our conservation history is a proud chapter--but only a chapter. There are many more chapters to be written. There is no set deadline to complete the book. Urgency, yes,--urgency to get man and his environment in harmony. And as long as we have millions more who will depend on the land; we will have new chapters in the book.

We need the great technologies at our command to do the job. But much more is needed than that. The willingness, the cooperation needed to get the job done is more difficult to come by than the technical problem of moving a mountain. The problem is getting the people to understand why the mountain should be moved at all.

As the Administrator stated at the September 1968 State Conservationists' meeting in Lincoln, Nebraska:

"At times there may seem to be more questions than answers, at least thoughtful answers that are geared to the challenges and changes all about us. May I pose a few of these questions-- questions which we are wrestling with at the national level?

1. Must the Nation protect an agricultural land-use base sufficient to meet the needs of our population 1980, 2000, 2010, and beyond? Who should do it?
2. Does our presently ample supply of land mask the seriousness of the misuse of resources in local areas, especially those associated with the concentration of 'people use' of land for non-agricultural purposes? What should be done? Again, who should do it?
3. If shifts in land and water use result in conflicts of use, how do we and other conservation leaders offer criteria which can help America choose between private and public needs?
4. Should technical services in resource conservation be limited to certain economic or social categories of recipients?
5. How can more of the workload of conservation practice installation be shifted to non-Service sources?
6. How do we and districts determine and keep current meaningful priorities of work?
7. How realistic are requests for additional authority and funds to deal with reduction of sediment and other agricultural pollution?
8. How can the Service further develop and strengthen its image as an action organization that gets things done?

These gentlemen, are but a few of the realistic questions that together we must face. If we professionals, and resource organizations, do not meet new needs of our people, the job is going to be handled by

some other device, organizational set-up, or even by government edict. For the public needs must be met--and this fact will continue to bear more heavily on the Nation the longer they go unmet.

I see this as the challenge confronting us today. It is broad, complex, and demanding. But if we meet the challenge with resolve, our accomplishment will be the most rewarding of any yet realized in any society.

17018
GRAIN STOCKS REPORTS: USDA announcement that January and April grain stocks reports will be discontinued disturbs the grain and allied trades. Complaint is that the far-flung grain business has to wait 9 months (from Oct. to July) to get benchmarks on supply situation. USDA says the action is forced by spending cuts.

Effect in grain trade will be to widen margins to play safe, some grain and feed men say. Freely translated that means pay farmers less.

Much criticism of the accuracy of the grain stocks reports is why USDA decided to discontinue them for the present. Officials say they know how to make them accurate but that they lack the resources.

AN AGRARIAN CONGRESSMAN SPEAKS: Jamie L. Whitten of Miss., chairman of the powerful Ag Subcommittee on Appropriations in the House, called for a parity of laws for agriculture with industry and labor if a healthy balance is to be maintained between agriculture, industry and labor. Without it the Nation suffers.

Whitten spoke to National County Agents Ass'n at Louisville, Ky. He said that through the ages man's standard of living has been measured largely by how much time he had left after providing the essentials of food, clothing & shelter. By this yardstick the U.S. has had marvelous success--only 5.6% live on farms, freeing the other 94.4%.

The urban Congress will not continue to make farm appropriations upon which present farm programs depend, he said, noting that only 47 out of 435 House members have as much as 20% farmers as constituents.

More & more want farmers to sell what's left of consumer dollar, after labor and industry have their take, at world price while he pays U.S. prices with built-in extra costs coming from power granted labor by law. That's the urban push on an agrarian congressman.

Whitten stressed that the 1938 AAA Act was to maintain a fair relationship between farm income and costs of production, and that from the beginning CCC could sell its stocks in world trade at world price but must hold up domestic sales to support levels. He said the latter provision had been overlooked by USDA for many years.

He defined a farmer as an American who must invest on the average \$73,000 to begin farming--one who must invest an average of \$36,500 for each worker he employs. Almost twice as much investment required for each factory worker. He said that to farm it now takes about enough money to start a bank--and enough nerve to rob one.

Farmers must have their fair share of the laws, Whitten said, and this calls for a return to the use of the term "parity"--parity in price and parity in law with labor and industry. It's a term he said an urban Congress comes nearer to understanding.

What does he advocate as a farm program? High and fair price supports, limited to each farmer's share of domestically used production, with the rest moving at competitive world prices.

Yours truly,

Wayne Sarrow

FARM REPORTS

7/1/68

CONSERVATION OF MAN'S TOTAL ENVIRONMENT

There is need to set down in sharp outline new and broadened conservation policies and the path leading to their implementation.

Pure air, clean water, stable soils, productive crop, pasture, range and forest lands, abundant wildlife, natural beauty, and the opportunity for man to live in harmony with his natural environment are essential. They are interrelated and mutually supporting objectives. We need to commit ourselves to meet this great challenge, and to move forward with the bold new actions needed to restore, conserve, and wisely use our natural heritage and maintain it for future generations.

Once again we are in a conservation crisis that is a matter of urgent public concern. At stake is the quality of our total environment. The crisis will not go away. It demands action now. It demands intelligent, purposeful direction at all levels of government and personal involvement by all citizens. Conservation is a physical task, a social philosophy, and an economic necessity.

Most of our renewable natural resources are in the country on privately owned land, which comprises about three-fourths of the Nation's area. This is the land we depend on for our food and fiber. On this privately owned land is most of our water and wildlife. It provides much of our outdoor recreational facilities.

An expanding national economy requires a growing resource base. A rising standard of living demands a more wholesome environment. Fulfilling the needs of millions of people yet unborn cannot be assured unless we improve our use

of natural resources and achieve planned patterns of land use without delay. The fruits of an expanding technology cannot be enjoyed unless technology itself is harnessed to meet the goals of soil and water conservation and resource development. In order to accomplish this in an orderly manner we need to:

1. Complete and publish basic information on all the Nation's soils as a base for intelligent land use determinations, and publicize more widely facts about the land and current conservation needs.
2. Develop a public awareness of conservation needs sufficient to achieve individual involvement by all Americans by establishing conservation showcases in each State, for purposes of conservation education, and making resource conservation education an integral part of all elementary and secondary school curricula. Strengthen the role of youth in resource conservation. Conservation decisions of the future will be made by today's young people. Their understanding and involvement now will help them when they become the decision makers.
3. Remove the jurisdictional question in the small watershed program as requested by hundreds of individuals and organizations and members of Congress and start operations on all watershed project work plans approved by committees of Congress. Accelerate America's Watershed Program by doubling the rate of new planning and construction starts to 200 projects each year in order to eliminate as quickly as possible the major flood threats in some 8,000 small watersheds. Include water quality as an authorized project purpose and further accelerate development of full multiple purpose projects.

4. Plan and develop all major river basins on an orderly basis giving full consideration to the needs of all people. Assist in the development of widespread recreation opportunities on farm and ranch lands, adequately catalogue and publicize them, and seek the establishment of needed recreational developments in connection with each watershed and resource conservation and development project carried out with public assistance.
5. Recommend legislation and funding to develop a cost sharing partnership with local authorities needed to attack the problem of serious erosion and sediment production on rural roads. Provide legislation and funding for the same type of cooperative action to begin urgently needed streambank stabilization control on at least 300,000 miles of streams. Provide needed authority to adequately treat the two million acres of orphaned strip mine lands which are contributing damaging sediment and acid mine drainage to our waters.
6. Enhance the quality of environment by improving, protecting and restoring environmental values and recommend needed legislation and funding to supplement and substantially accelerate the current programs related to agricultural pollution abatement.
7. Develop through appropriate State and private organizations an awareness of the widespread public benefit of conservation programs and the need for greater financial participation by State and local government. Develop interpretations of soil and make available information in every community to help public agencies determine desirable land use, and provide technical services, and guidelines to county and municipal governments to aid in proper long range planning, site selection, and erosion control.

8. Relate all Federal land and water programs that involve cost-sharing and grant-in-aid to sound conservation plans, and accelerate research that will help achieve specific reductions in air and water pollution.
9. Provide an adequate continuing corps of specially trained professional conservation leaders to furnish technical assistance to conservation districts and their cooperators.
10. Pay tribute to the local citizens who serve as Conservation District Supervisors and provide the local leadership for conservation development and self-government in the Nation's 3,000 local conservation districts.
11. Intensify protection, management, and development of America's public lands so they contribute fully to local and national economies as sources of water and timber for industry, as a base for tourism through recreation and wildlife, as grazing lands for livestock, and as aesthetic attractions.
12. Provide competent technical personnel and leadership to help developing nations increase their food production by sharing our experience and knowledge in the field of natural resource development and management.