gram, the NSF has already awarded grants totaling almost \$97 million to 25 institutions in 14 states. The most recent recipients are Carnegie Institute of Technology, the University of Maryland, the University of North Carolina, Notre Dame and Vanderbilt Universities.

The only item allotted a specific sum of money in the House bill was a program of supplementary training for high school science and mathematics teachers, for which the legislators set up a \$37.6 million minimum. The NSF had requested that the program be broadened beyond its present scope, which includes only summer and academic-year training institutes for teachers, but the House Appropriations Committee opposed this recommendation.

Among the specific projects planned by the NSF for the coming fiscal year is a 150-inch reflecting telescope to be built in Chile at the Cerro Tololo Interamerican Observatory. The instrument, not scheduled for completion before 1969 or 1970, is to be the Southern Hemisphere's equivalent of a similar 150-inch telescope being built at Kitt Peak Observatory, Arizona.

An increase of almost \$4 million was requested for the NSF's Science Information Service, which is engaged in establishing a national computerized data center for chemists and plans to extend the system to other sciences, including sociology and astronomy.

The bill next faces a trip through the Senate, but in the past this has proven to be an easier journey than that through the House.

## **Drought or Sinkholes**

In Bartow, Fla., Mrs. Benny Watson got up on a Sunday morning. She glanced out the window to see the two houses next door slowly disappear into the ground. The Watsons ran.

The houses were the latest victims of Florida's curious geology—a rock structure that erodes underground, then falls in, engulfing houses, roads, even people.

Last week's heavy rains, although they broke a devastating drought, increased the danger from sinkholes. Underground water that usually held up the surface formations had drained away during the bitter dry spell; the new rain soaked the surface, making it heavier and more likely to fall in.

Floridians live with a quirk of geological fate which began some 100-million years ago when what was to become Florida was a shallow tropical sea dotted with small islands.

Today's Atlantic coastal plain was submerged; the Gulf of Mexico extended as far north as Cairo, Ill. That

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vast area of warm, shallow sea water was the recipient of eons of dissolved sediments from the eroding Appalachian Mountains as well as an accumulating rain of debris from teeming sea life.

The result was several thousand feet of calcium carbonate—limestone—deposits over what are now the states of Louisiana, Mississippi, Alabama and Florida. Then, in the period between 60-million and 1-million years ago, Florida and the other Gulf Coast states rose from the sea.

Almost all of Florida is underlain with rock which geologists describe as "soft limestone containing truly enormous quantities of ground water." This means that Florida's basement is



Danger grows as drought ends.

honeycombed with caves. And that sinkholes are inevitable.

As rain falls it picks up carbon dioxide from the air, forming a very weak solution of carbonic acid. To this is added humic acid found in the soil. The end result is a dilute acidic solution capable of dissolving limestone rather rapidly, forming cavities and then subterranean caverns. A sudden rain will then overload the gound and any weakness in the formations may cause cave roofs to drop in and form sinkholes.

## Indian Education

The progress of contemporary American Indian education reads like the history of Indian-white relations—promises made and not kept, funds continually cut, too little sensitivity on the part of whites, mistrust and alienation on the part of Indians.

Though this condition has existed for 75 years, the Government has only recently begun to pay attention. Last week a conference of 50 anthropologists, sociologists, educators, government officials and Indian leaders met at Pennsylvania State University to initiate a major reassessment of Indian educa-

tion. The issues are basic: What kind of education—mainstream American or Indian oriented—what values, what goals, what language, how much local control, even what studies need to be undertaken in order to answer the questions.

The conference was backed by the well-funded U.S. Office of Education, which probably means, above all, that the promised re-evaluation of Indian education will actually be forthcoming.

Several years ago, Congress told the Bureau of Indian Affairs to do the same status study and then neglected to appropriate money. Because it has always been hampered by limited funds, the Bureau tends to react defensively to any criticism of the way Indian education has been handled.

"We were there when the sand was blowing under the door," says Philleo Nash, former Commissioner of the Bureau. He said a very good education system was established during the Kennedy years, but it hasn't had time to show results.

"If we had been spending money for the past 75 years at the level we are doing today, we wouldn't need a conference," he says.

The Bureau would not readily pass over the education of 50,000 Indian children to the Office of Education, he declares, but it welcomes the cooperation. Another 100,000 reservation children are attending state public schools.

Actually, young Indian leaders and a good number of anthropologists are calling for more basic reform than the Bureau has yet provided.

Representative of this group is Robert A. Roessel, an educator who, with poverty war money, runs a highly-applauded demonstration school at Roughrock, Arizona, 120 miles from Gallup.

Describing the failures of traditional education, Roessel says white society has tried to impose its own values, telling the Indians they should "eat green leafy vegetables, sleep on a bed and brush their teeth. In short, we try to make white men out of Indians."

According to his own research, Indian parents want their children to have a rudimentary knowledge of money so they cannot be cheated, an English vocabulary of 50 words to use at the trading post, and courses in cooking, nutrition and automechanics.

In his opinion and the opinion of Dr. Sol Tax, Dean of University Extension at the University of Chicago, Indians on the reservation simply do not want to be white men or they would not stay on the reservation.

They don't want what they consider the values of an "avaricious society," says Dr. Tax, who is also an anthropologist. "We have said, if you want bread, you must have white ways. The Indian has said, 'Then I won't eat.'"