#### UPPER HOCKING WATERSHED

Ohio

Revised
Work Plan
for
WATERSHED PROTECTION

Prepared by
Soil Conservation Service
United States Department of Agriculture
July 1958
(Revision of 1955 Plan)

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#### WATERSHED WORK PIAN AGREEMENT FOR UPPER HOCKING PILOT WATERSHED PROJECT

#### between the

Fairfield Soil Conservation District, Lancaster, Ohio (hereinafter referred to as the Soil Conservation District)

The Hunter's Run Conservancy District, a legally organized Conservancy District of the State of Ohio (hereinafter referred to as the Conservancy District)

and the
Soil Conservation Service
United States Department of Agriculture
(hereinafter referred to as the Service)

Whereas, the Soil Conservation District and the Service have on March 29, 1954 entered into a memorandum of understanding for a cooperative arrangement in preparing a plan and installing works of improvement for the Upper Hocking Watershed, State of Ohio, under authority of the Soil Conservation Act of 1935 (Public Law No. 46 - 74th Congress) and the Department of Agriculture Appropriation Act, 1954 (Public Law 156, 83rd Congress); and

Whereas, the responsibility for the administration of portions of the Soil Conservation Act relating to the installation of works of improvement have been assigned by the Secretary of Agriculture to the Service: and

Whereas, the Soil Conservation District and the Conservancy District have entered into a memorandum of understanding dated December 1, 1952 relating to the planning and installation of said works of improvement; and

Whereas, there has been developed, through the cooperative efforts of the Soil Conservation District, the Conservancy District, and the Service, a plan for works of improvement for the Upper Hocking Watershed, State of Ohio, hereinafter referred to as the Watershed Work Plan, which plan has

been approved in the Court of Common Pleas, Fairfield County, Ohio, on May 25, 1954, in compliance with the statutes thereto applying; and

Whereas, it is the desire of the parties to this agreement that the Watershed Work Plan be revised to reflect changes in cost-sharing arrangements and to more fully define the responsibilities of the parties to this agreement;

Now, therefore, in view of the foregoing considerations, the Conservancy District, the Soil Conservation District and the Secretary of Agriculture, through the Service, hereby agree on the revisions in the Watershed Work Plan, and further agree that the works of improvement as set forth in said Plan will be installed by June 30, 1961 and will be operated and maintained substantially in accordance with the terms, conditions and stipulations provided for therein.

- A. The parties hereto mutually agree that in installing, operating and maintaining the works of improvement described in the Watershed Work Plan:
  - The Work Plan will be revised and supplemented as soon as practicable to reflect the changes in this agreement. A copy of this agreement will be incorporated in and become a part of the Work Plan.
  - 2. The estimated cost of structural measures to be paid for by the Federal Government and by the Non-Federal interests, including the Conservancy District, Soil Conservation District and private interests, are shown on the table

attached to and made a part of this agreement.

- a. The sum of the costs of the structural measures borne by non-Federal interests may exceed, but may not be less than 17.5% of the total cost of the structural measures, now estimated to be \$1,364,187. The terms "structural measures" includes all measures providing for flood prevention as described in the Watershed Work Plan. (A Measures)
- b. Construction costs shown exclude costs of engineering services and costs of land, easements, and rights-ofway.
- c. Engineering services include costs of surveys, design, preparation of plans and specifications, supervision of construction, and inspection during construction.
- d. Costs of land, easements, rights-of-way include the cost of all land right instruments necessary and adequate to enter, construct, operate, maintain and inspect the works of improvement as contemplated in the Watershed Work Plan.
- 3. The costs shown in this agreement are estimates. In finally determining the cost to be borne by the parties hereto, the actual cost of structural measures will be used.
- 4. The Watershed Work Plan may be amended or revised, and this agreement may be modified or terminated, only by mutual

agreement of the parties hereto.

- The Conservancy District and the Soil Conservation District will hold the Federal Government free from any or all obligations to incur any cost for repair, reconstruction, operation or maintenance of any structural improvements after they have been officially turned over to the Conservancy District. Each unit of construction will be turned over to the Conservancy District as rapidly as it is completed in accordance with the applicable contract or contracts.
- 6. This agreement does not constitute a financial document to serve as a basis for the obligation of Federal or Conservancy District funds. Financial and other assistance to be furnished by the Service and by the Conservancy District in carrying out the Watershed Work Plan are contingent on the appropriation of funds for this purpose.
- 7. No member of or delegate to Congress, or resident commissioner, shall be admitted to any share or part of this agreement, or to any benefit that may arise therefrom; but this provision shall not be construed to extend to this agreement if made with a corporation for its general benefit.

### B. The Conservancy District will: -

 Execute and furnish the Service, prior to the issuance of invitations to bid, a certification that the Conservancy District has acquired and recorded all necessary land rights. In the event the Conservancy District exercises the power of eminent domain, said District will indicate on the certification the land rights necessary for the Project which are not covered by easements and agree that condemnation proceedings will be filed prior to the issuance of invitations to bid and a showing made in writing to the Service that such proceedings have been filed.

- 2. Accept full financial and all other responsibility for excess costs resulting from the Conservancy District's failure to obtain adequate land rights.
- 3. Arrange for and hold the Service free from costs for the removal, relocation or salvaging of all public utilities, buildings, roads, pipelines, fences, culverts, bridges, et cetera, which are not to be abandoned, and see that such arrangements are carried out in sufficient time to avoid interference with the contractor.
- 4. Acquire or provide assurance that landowners or water users have such water rights pursuant to State law as may be needed for the installation and operation of the works of improvement.
- 5. Approve all plans, designs and specifications prior to the awarding of contracts by action of the Conservancy District engineers or by said District's Board of Directors.
- 6. Be responsible for the operation and maintenance of the

structural works of improvement by actually performing the work or arranging for such work in accordance with maintenance agreement entered into by the Soil Conservation District and the Conservancy District on June 19, 1958, which maintenance agreement is made a part of this agreement.

- 7. Raise funds necessary for carrying out Conservancy
  District obligations for construction, operation and
  maintenance.
- C. The Soil Conservation District will:
  - as "private" costs for structural measures (A measures) in Table I of the Watershed Work Plan. Of such costs arising under contracts administered by the Service, any costs for subwatershed waterways and channel improvement in excess of the estimated amounts shown in Table I for these items will be borne by the Service up to an amount which will make the Service's share of the total cost of structural measures 82.5 per cent.
  - 2. Obtain agreements from the owners of not less than 50% of the land above each of the floodwater retarding structures to carry out the conservation farm plans on their land.
  - 3. Provide assistance to landowners and operators to assure the installation of the land treatment measures shown in

the Watershed Work Plan.

- tain the land treatment measures for the protection and improvement of the Watershed.
- 5. Incorporate in the Soil Conservation District Work Plan those portions of the Watershed Work Plan which directly concern the Soil Conservation District.

#### D. The Service will:

- 1. Provide all engineering services necessary for the construction of works of improvement as provided in the Work plan, prepare and issue invitations to bid, award contracts, and bear the cost of such contracts in an amount up to, but not exceeding 82.5%, of the total cost of structural measures, now estimated to be \$1,364,187.
- Administer the contracts, inspect the work while in progress, and require contractors to comply with standard government procedures for construction of works of improvement.

The Hunter's Run Conservancy District		
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Date	State of	
La ve	Attact.	
	Attest:	(Title)
Fairfield Soil Conservation District	This action	n authorized at an eeting of
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Date	Attest:	<del>needin kirin kirin kirin kirin kanalar saadan kanalar kirin kirin kirin kanalar kanalar kirin kanalar kanalar k</del>
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UNITED STATES DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE		
By:		
Date		

# Cost-Sharing of Structural Measures on Upper Hocking Pilot Watershed Project, Ohio

Îtems	<u>Federal</u>	Prior to Project Auth- orization	Non-Federal After Project Authoriza- tion to June 30, 1958	Obligation to be Incurred	s Total	Total Project	Percent Non- Federal
Construction	\$894 <b>,</b> 547	\$33,170	674	\$54 <b>,</b> 450	\$87 <b>,</b> 620	\$982,167	
Engineering Services	218,072	mes	439)	10		218,072	
Land, Easements & Rights-of-Way	500	: <b>3866</b>	23,023	100,925	123,948	123,948	
Administration-Non-Federal	ecto	etia		40,000	40,000	40,000	
Total - All costs	1,112,619	33,170	23,023	195,375	251,568	1,364,187	18.4
		Construction Costs	Engineeri Service	war.	Land, Eas and Right		
Floodwater-Retarding Structures		776,009	152,44	15	95,0	00	
Sediment Control Structures Subwatershed Waterways Channel Improvements		123,958 7,280 41,750	53,41 3,96 8,25	O	5,9	25	
Undistributed Cost to Date			Ug ⊆ D wike saah winnekanayan nikanayan nikanayan nikanayan	and the second	23,0	23	
		948,997	218,07	2	123,9	48	
Total Cost After Authorization Cost Prior to Authorization		948,997 33,170	218,07	2	123,9	48	
Total cost		982,167	218,07	2	123,9	48	

SUPPLEMENT to the MAINTENANCE AGREEMENT

for
Upper Hocking Watershed Project
between
Fairfield Soil Conservation District
and
Hunters Run Conservancy District

The Hunters Run Conservancy District hereby agrees to carry out the maintenance requirements as outlined in this agreement.

This maintenance agreement will encompass all those works of improvement described in the amended Hunters Run Conservancy District Official Plan as (1) Major floodwater retarding structures, (2) Stabilizing and sediment control structures, (3) Subwatershed waterway improvement, and, (4) Stream channel improvement. In addition to the maintenance on the stream channels that are improved in accordance with the Official Plan, the Conservancy District will maintain all major stream channels which have a drainage area in excess of one square mile.

Since it is anticipated that these works of improvement will be completed over a period of years, this Agreement will be further supplemented by letters from the Fairfield Soil Conservation District to the Conservancy District. These letters will list the works of improvement as they are completed and responsibility for maintenance is to be assumed by the Conservancy District upon acknowledgment of the letters.

#### INSPECTIONS

When - Inspections of all works of improvement will be made yearly during the month of July for the purpose of determining maintenance requirements. In addition to the annual inspection, an inspection will be made after each major flood.

By Whom - The inspections will be made by a representative of the Conservancy District and a supervisor of the Fairfield Soil Conservation District. The State Conservationist of the Soil Conservation Service will be requested to designate a representative to participate in these inspections.

Report of Inspections - The Conservancy District will prepare and maintain a record of the maintenance inspections and actions taken.

These records should be available at all times during business hours for review by the Soil Conservation District and by the Soil Conservation Service.

#### Items of Inspection -

- a. Major floodwater retarding structures and stabilizing and sediment control structures
  - Condition of vegetation, including adequacy of protective cover and presence of undesirable vegetation such as weeds, brush or annual grasses.
  - 2. Rodent damage.
  - 3. Erosion damage to embankments, vegetative spillways and waterways, and damage around inlets and outlets of spillways and outlet channels below the outlets.
  - 4. Accumulation of debris around trash racks, in the impoundment areas or in spillways.
  - 5. Condition of concrete.
  - 6. Condition of trash racks, guard rails and protective fences.
  - 7. Any other items which might retard the full effectiveness of the structure.

- b. Subwatershed waterway improvement and channel improvement
  - Condition of vegetation, including adequacy of protective cover and presence of undesirable vegetation such as weeds, brush or annual grasses.
  - 2. Erosion damage to stream banks.
  - 3. Accumulation of debris and presence of sand or silt bars.

#### MAINTENANCE

- a. The Hunters Run Conservancy District agrees to maintain and keep in good repair the works of improvement named in this Agreement and listed in letters supplementing it. Any damage or unfavorable or undesirable conditions found in the inspections will be repaired or corrected.
- b. On the major floodwater retarding structures the major items of maintenance will be:
  - 1. Replacement or repair of earth fills or spillways due to erosion or other damage.
  - 2. Maintenance of good protective cover on fills and spillways by replacing or repairing damage to sod or seedings and by periodic mowing, spraying or otherwise removing undesirable plants, weeds and brush.
  - 3. Removal of debris from trash racks, spillways and impoundment areas.
  - 4. Repair of any damage to concrete, trash racks, guard rails and protective fences.
- tenance agreements whereby they agree to carry out normal maintenance items on the stabilizing and sediment control structures,

the subwatershed waterway improvement and the channel improvement work, including but not limited to,

- Control of undesirable weed and plant growth, including trees and brush on fill embankments, emergency spillways and on channel banks by mowing, spraying or other accepted methods.
- 2. Removal of debris within the impoundment areas which might cause clogging of spillways.
- 3. Removal of debris and silt bars which may cause clogging of stream channels.

Normally the maintenance required from the Conservancy District on these improvements will be replacing or repairing eroded banks and advising landowners of their maintenance obligations.

#### ESTIMATED ANNUAL COSTS

Maintenance costs are based on a percentage of the estimated construction costs. These percentage figures are as follows:

Floodwater retarding structures - ½ of 1% or \$2,100

Stabilizing and sediment control structures - ½ of 1% or 200

Subwatershed waterway improvement - 5% or 980

Channel improvement - 3% or 700

Average Annual Costs - Total \$3,980

The annual maintenance costs of approximately \$1,000 for soil conservation practices, cooperative fire control and forestry plantings is anticipated to be a contribution of private individuals and other organizations such as local fire departments.

### TYPE OF EQUIPMENT USED

This will be based upon the type of damages that occur. The type of equipment used will be mutually agreed upon by the representative from the Conservancy District and the Soil Conservation District.

#### CONTRACTUAL METHODS USED

Where maintenance work requires the use of heavy machinery for earth work or concrete work, the Conservancy District will contract to complete the work in accordance with Soil Conservation Service specifications or the specifications of any Conservancy District engineers.

SECURING OF NECESSARY FUNDS

This will be done in accordance with limitations as outlined in Section 6101.53 R. C. of the Ohio Conservancy Act.

#### RIGHT OF INGRESS AND EGRESS

The parties hereto agree that government representatives concerned with or interested in the maintenance of the works of improvement shall have full access to such works of improvement for inspection purposes as they may deem necessary and proper.

It is further agreed that the Government has possession of all gauges and recording instruments and the utilities for such equipment, and that the Government reserves the right to recover, add to, or alter this equipment at any time.

Signed.

		orgued:
Date	$6 {\scriptstyle \frac{19}{9}} {\scriptstyle \frac{58}{9}} {\scriptstyle \frac{58}{9}}$	Hunters Run Conservancy District
		(Signed) Edward Wells Chairman
		(Signed) James S. Peterson Secretary
Date	June 19, 1958	Fairfield Soil Conservation District
		(Signed) R. C. Riegel Chairman
		(Signed) George E. Baker Secretary

UPPER HOCKING WATERSHED
Fairfield County Ohio
Revised
WORK PLAN
for
Watershed Protection
July 1958

#### Purpose of Revision:

This revision of the Work Plan is prepared to more fully explain the Watershed Work Plan Agreement dated July 1958, copy of which is attached hereto. This revision does not nullify all provisions of the original Work Plan. Those items not mentioned in this revision are essentially the same, such as benefits, damages and watershed problems. Summary of Revised Plan:

# This plan is designed for waters

This plan is designed for watershed protection. The plan consists of two types of measures. The structural measures (A measures) are defined works of improvements which contribute to reduction of floodwater and sediment damages and meet one or both of the following conditions:

(1) produce benefits that are primarily "off-site", that is, not accruing to the landowners on whose land they are installed, and (2) require group or agency action for installation. These measures include, floodwater retarding structures, stabilizing control structures, subwatershed waterway improvements and stream channel improvement.

B measures are defined as those measures installed primarily to reduce runoff and soil erosion. The benefits from these measures accrue primarily to the landowners on which they are installed and installation costs are borne by the landowners.

The Supplemental Maintenance Agreement attached hereto, explains the provisions and procedures for carrying out the maintenance requirements for said works of improvement.

# Measures Primarily for Flood Prevention (A Measures)

The quantities and installation costs of these measures are summarized in attached Table I's. The locations of these measures is shown in Figures 1, 2, and 3.

### Floodwater Retarding Structures:-

The system of 8 major floodwater retarding structures is designed for the purposes of protecting land from inundation by providing temporary storage for runoff from approximately 50 per cent of the watershed. The structures are earthen dams with fixed drawdown tubes of concrete construction. The installation costs includes cost of seeding and sodding all scalped surfaces and land restoration as needed. The estimated cost of these structures is \$1,081,504.

#### Stabilizing Control Structures:-

There are 24 such planned for purposes of protecting existing or newly developed waterways from erosion and sedimentation. The structures are earthen fills with fixed drawdown tubes of corrugated metal pipe construction. The estimated cost of these structures is \$188,416.

Subwatershed Waterway Improvements:-

There is 2.2 miles of subwatershed waterways which need stabilizing for purposes of reducing soil loss and land destruction by means of shaping, sodding or seeding. The estimated cost is \$11,785.

#### Stream Channel Improvement: -

The 9.5 miles of stream channel improvement is needed to prevent degradation of stream channels, reduce cutting of stream banks thereby reducing sedimentation, and the reduction of land destroyed. This work consists mainly of slight channel changes, bank sloping and seeding. The estimated cost is \$82,482.

# Measures for Conservation of Water and Watershed Lands (B Measures)

These measures have been or will be installed on the watershed land in conformity with attached agreements. These measures include (1) land use adjustments, (2) strip cropping, (3) terrace outlets, (4) terraces, (5) farm waterways, (6) pasture seeding, (7) wildlife area establishment, (8) field diversions and (9) tree planting. Reference is made to the original Work Plan, since there is no change in the land treatment program as a result of the new agreement.

## Accomplishment of the Plan

The attached Table I's indicates the schedule of operations and cost sharing which the cooperating parties have agreed should be followed to achieve the most efficient prosecution of the work.

As prescribed in the Watershed Work Plan Agreement the Conservancy District will provide or cause to be provided easements for all structural measures as defined in this revised plan at no cost to the Federal Government. This estimated cost is \$123,948 of which only 95,000 needs to be paid for from assessments. In order to administer these and other costs the Conservancy District agrees to raise \$40,000. This total of \$135,000

24

constitutes the amount of money to be raised by assessments exclusive of the 1/9 contingency required by Ohio Conservancy Law. The \$33,170 spent by non federal before project authorization and \$23,023 since project authorization are used in cost sharing determination but are not a part of obligations to be incurred.

The Federal government agrees to pay all construction costs for structural measures within the 82.5% limitations as defined in the Watershed Work Plan agreement including administration costs of all contracts.

The only remaining costs on structural measures are the private costs as outlined in the attached Table A. The construction costs contributions for Federal Contracts of \$6080 for stream channel improvements will be by Trust Fund agreement between the landowner and the Fairfield Soil Conservation District. This fund is in turn transferred to the Soil Conservation Service. The \$8750 for clearing and grubbing trees on stream channel improvement may or may not be by Trust Fund. If the landowners so desire they can do this work with their own labors, which must be done before the advertising of contracts. All other costs shown on this table are borne by landowners, county, State of Ohio and utility companies. These may or may not be cash transactions depending upon the situations. Normally it will be a credit for a service performed based upon the estimated costs. The landowners will pay all construction costs for subwatershed waterway improvements, also fencing and seeding on stabilizing control structures. The county commissioners and township trustees will pay all costs of road resurfacing, guard rails, et cetera, in connection with floodwater retarding structures. Although not in writing the utilities

companies have agreed to relocate their facilities as required at an estimated cost of \$5300. In accordance with Section B-3 of the Watershed Work Plan Agreement the Conservancy District agrees to pay any costs in excess of this amount.

The cost of \$12,688 for relocation of rights-of-ways will be borne by Ohio Division of Wildlife as the floodwater retarding structure sites are purchased for public hunting and fishing areas. Other Federal costs but not included in cost-sharing computations are: (1) The technical services cost for installation of land treatment (B Measures), (2) Costs for evaluating the effects of the program and facilitating costs.

TABLE IA INSTALLATION COST

Project: Upper Hocking

State:

Ohio

Total Project Costs

	Prophospital Annual	Value propose de desago	Estimated Cost						
Structural Measures	Unit	No. to be Applied	Fed	eral.	Non- Federal Public	Private	Total		
Measures Primarily for Flood Prevention Soil Conservation Service	graph and makes a proper security of the contract of the contr	And the Continue of the Contin	Construction	Engineering Services	and an article of the control of the	t de Maria de mais estados y el destribución y a ser acercano major na	AMERICA (MARIAMENTA) (MARIAMENT		
Floodwater Retarding Structure	Number	8 1	749,671	152, Աե	700, وبلا	35,688	1,081,504		
Stabilizing Control Structure	Number	21, 2/	118,031	53,417	THE THE REPORT OF THE PARTY OF	16,968	188, المار		
Subwatershed Waterway	Mile	2.2 3/		3,960		7,825	11,785		
Stream Channel Improve- ment	Mile	9.5 岁	26,845	8,250	20,000	27,387	82,482		
Subtotal			894,547	218,072	::		:		
Total			1,112,619		163,700	87,868	1,364,187		

<sup>1/</sup> Structures 1,2,3,4,5,6,8&9
2/ A,B,R-3,B-4, R-6, R-7, R-13, R-14, R-15, R-18, R-21, R-23, R-25, R-32, R-33, R-37, R-41, R-42, R-46, R-47, R-57, R-61, R-63, R-65
3/ Reaches WI-A, WI-1, WI-2, WI-3, WI-4, WI-5, WI-6, WI-7
Reaches C-a, C-b, C-1, C-2, C-3, C-4, C-5, C-6 & C-7

Project: State:

Upper Hocking Ohio

LEL INSTALLATION COST Project Costs - To Date

		rear Edwards and		erroman francisco anno espera composições composições por composições de como que a superior a que a superior q	=	Actual Cost	77 Paris II A 1 (4)
Structural Measures	Unit	No. Applied	Federa	1	Non- Federal Public	Private	Total
Measures Primarily for Flood Prevention Moil Conservation Service	ф. Умідэвай Маталия и пробеження пробеження пробеження пробеження пробеження пробеження пробеження пробеження п	edil/yerphicerathera	Construction	Engineering Services	िकार प्रस्कार प्रविद्या स्थापित	<del>aman ajaran ng pinggopon diamondalish-jo</del> y jijanan-uparatina nusina hingyi <u>n sagangkun</u> g u	engge en die der verstelle de v
loodwater Retarding Structure	NO .	2 1/6 2/	148,019	3,865 54,693	8,700	9,350	169,93
Subtotal	STAY LOSSING LAYER	Newscarzasta	148,019	58,558	8,700	9,350	<u>51,,69</u> 221,,627
Stabilizing Control Structure	Annature recommendation continued and a second	2 <u>3/</u> 7 <u>3/</u>	29,084	11,480		3,000 2,116	3,000 42,680
Subtotal	And the state of t	15	29,084	10,101 21,581	のできるという。 のではないといるないという。 のではないという。 のではないという。 のではないという。 のではないという。 のではないという。 のではないという。 のではないという。 のではないという。 のではないという。 のではないという。 のではないという。 のではないという。 のではないという。 のではないという。 のではないという。 のではないという。 のではないといるないという。 のではないという。 のではないという。 のではないという。 のではないという。 のではないという。 のではないという。 のではないという。 のではないという。 のではないという。 のではないという。 のではないという。 のではないという。 のではないという。 のではないという。 のではないという。 のではないという。 のではないといるないといるないといるないといるないといるないといるないといるないとい	**************************************	10,100 55,781
ubwatershed Waterway	The state of the s	0.2 4/	RPM-Divinion promotion to	00	MICHAEL PROPERTY AND	170	170
Subtotal	** A PROSERVE STATE OF THE STAT	O.3	rener rikesiya rener	<u>90</u> 90	NE PARAMETER PAR	<u>300</u> 470	<u>390</u> 560
tream Channel Imp.	Mile	4.00 1.02	5 <b>,</b> 039	2,6կ9	20,000	10,000	30,000
Subtotal.	asined received that	1.02 5/	5,039	2,649	20,000	<u>2,557</u> 12,557	10,245 40,245
Total	energy community		182,112	82,878	700 و28	27,193	321,213

<sup>3/</sup> A & B - Prior to project authorization: R-3, S-4, R-6, R-7, R-13, R-14, & R-15 - After project authorization U.2 Mile prior to project authorization; O.1 mile after project authorization

<sup>5/ 4</sup> miles prior to project authorization; 1.02 after project authorization

TABLE IC INSTALLATION COST

Project:

Upper Hocking

State: Ohio

For Total Remaining Project Costs

		Training and the second	SOUTH AND THE STATE OF THE STAT		Estimated Co	Estimated Cost				
MEASURES	Jnit	No. to be Applied	Fede	Federal		Private	Total			
A-Measures Primarily for Flood Prevention Soil Conservation Service	Programme and the control of the con		Construction	Engineering Services		gardinaring and the second and the s	<ul> <li>O HANGE THE STATE OF THE STATE</li></ul>			
Floodwater Retarding Structure	Number	6 1/	601,672	93,887	135,000 3/	26 <b>,</b> 338	856,877			
Stabilizing Control Structure	Number	15 2/	88,947	31,836	Andrewsky States of the States	11,852	132,635			
Subwatershed Waterways	Mile	1.9 4	or managed plans	3,870	rane superioresi	7,355	11,225			
Stream Channel Improve- ment	Mile	4.48 5/	21,806	5,601		14,830	42,237			
SCS-Subtotal	NACESTO PETERS (SECTION SECTION S	of the comment of the	712,405	135,194	135,000	60,375	1,042,974			
Biotempoleralismus	помунальность изделениям.	RECORD TO SERVICE STREET, THE	Fede	ral	Non- Federal Public	Private	Total			
-Measures - for conservat	ion of wa	itershed lan	ds that contri	ibute directly	to flood preven	tion-	TRE-PRESENCE SECURITION SECURITIO			
Soil Conservat			10,33	• 3	**************************************	86,169	96,502			
Forest Service	3			Section 2		1,172	1,172			
Facilitating Measures				· ·	SECONDEPEND		Kijikilyalawa kal			
Program Evalua			7,11		PA KARA STANLANDA	- 1 1	7,119			
GRAND TOTAL WA	žI į	135,000	147,716	1,147,767						

R-10, R-21, R-23, R-25, R-32, R-33, R-37, R-41, R-42, R-46, R-47, R-57, R-61, R-63, R-65

Includes 40,000 administration - Non Federal

<sup>2/</sup> R-18, R-21, R-23, R-25, K-32, R-33, R-37, F 3/ Includes 40,000 administration - Non Federa 4/ Reaches WI-2, WI-3, WI-4, WI-5, WI-6, WI-7 5/ Reaches C-1, C-4, C-6, C-7

Project:

Upper Hocking

TABLE I INSTALLATION COST

State:

Ohio

For Fiscal Year 1959

Date July 1958

The second state of the se	innerele soulle communication dis	in a spiller om men som som state og state for skiller og state og skiller og skiller og skiller og skiller og	tor tiscal Kea	r 1959	D	ate July 19	58 		
	Secientality of Amburos	States of the state of the stat	Estimated Cost						
Measures	omission DAT	No. to be Applied	Feder	al	Non- Federal Public	Private	Potal		
A-Measures Primarily for Flood Prevention Soil Conservation Service	STATE OF THE PROPERTY OF THE P	- Andrew of America (Control of the Control of the	Construction	Engineering Services	d. While damphile Commission of the Commission o				
Floodwater Retarding Structure	Number	4 2/	120,120	51,152 4,000	manufaction and the state of th	23,338	494,610		
Subtotal Stabilizing Control	William VIII and All All All All All All All All All Al		420,120	55,152	110,000 5/		4,000 498,610 110,000		
Structure Subwatershed Waterways	Number Mile	15 4/ None	80,052	15,918		11,852	107,822		
itream Channel Improve- ment	Mile Mile	None					er i erene ere		
SCS-Subtotal	Service Community of the Community of th	To an contract of the same of	500,172	71,070 1/	110,000	35,190	716,432		
-Measures - for conservat: Soil Conserva	ion of wa	tershed lan	Federa ds that contrib	ute directly to	Non- Federal Public flood preventi	Private on	Total		
Forest Service acilitating Measures		TGG	5,70	O statement of the stat	Sissistemanuses	34,595 641	40,295 641		
Program Evalus GRAND TOTAL (V	VATERSHED	PROTECTION	7,11 FUNDS) 584,06	· *	110,000	70 104	7,119		
'Includes \$12,000 estimat' Structure Nos. 3, 4, 8 a' Structures Nos. 5 and 6	ted assis	tance from E	WWP Unit			70,426	764,487		
/ Structures R-18, R-21, F	2-23, R-2	5, R-32, R-3	3, R-37, R-41,	R-42, R-46, R-	47, R-57, R-61.	R-63. R-65			

5/ Includes 15,000 for Non Federal Administration

Project:

Upper Hocking

INSTALLATION COST

State:

Ohio

For Fiscal Year 1960

Date July 1958

	SERVICE CONTRACTOR	The second		原には記載 homes notice-1人間 (10年で20年20年 notice 15.0	Security and the security of t	Estimated (	Cost	
M <sup>E</sup> asures	Unit	No. to be Applied	William III alianos de la companio della companio d	Federa	1	Non- Federal Public	Private	
-Measures Primarily for Flood Prevention oil Conservation Service			Const.	Contig.	Eng. Service	And the second s	T. T. T. P. C.T. D.C.	Total
loodwater Retarding Structure	Number	4 2/ 2 3/	<u>187</u>	46,345	25,585 4,000	a militar construction and a particular state of the stat	3 000	71,930
Subtotal tabilizing Control	NACES AND THE STEEL SHARE SHAR		121,387	46,345	29,585	10,000	3,000 3,000	128,387 200,317 10,000
Structure  1bwatershed Waterways	Number Mile	15 <u>4</u> / 1.9 <u>5</u> /		8,895	15,918 2,870	newskapeneral Medical Interview (Medical Interview	7,355	24,813 10,225
tream C <sup>H</sup> annel Improve- ment SCS-Subtotal	Mile	ŝ	/19,806 141,193	55 <b>,</b> 240	4,101 52,474 <u>1</u> /	10,000	14,830	38,737
and the control of th	ത്ത് ( - ൽ പ്രത്യേഷത്തെ വാധത്താന പ്രവാത്രി പ്ര	ill West - made ball from the electric as it we give sea are a	reneralis and substitution of the substitution	Andrewski a start (1960) (1970) - Green alles and andrewski A	and the first state of the stat	Non- Federal	25,185	284,092
Measures - for conservati Soil Conservat	on of wa	tershed la	ands that		te directly	Public to flood preven		Total
Forest Service				4,633	And the second s		51,573 531	56,206 531
GRAND TOTAL (W Includes \$8,000 estimate Structures Nos. 3, 4, 8 Structures Nos. 5 and 6 Structures Nos. R-18, R-	10,000	77,289	340,829					

5/ Reaches Nos. C-1, C-4, C-6 and C-7

Project: Upper Hocking

INSTALLATION COST

State:

Ohio

For Fiscal Year 1961

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TO AND THE PROPERTY COMMENT OF COMMENTS AND AND THE PROPERTY OF THE PROPERTY O		**************************************	Security of the security of th		- Title (California) - Angert Anis (Angert Anis) (Angert Anis) (Anis) - Anis (Anis) (Anis) (Anis) (Anis) (Anis)	Estimated (	ost	-tal gentrale-nemi-nemi-nemicro-Octobring apares steet nethinballeniiii geniriigi sühällastel käpegeri
Measures	Unit	No. to be Applied		Federal		Non- Federal Public	Private	Total
A-Measures Primarily for Flood Prevention Soil Conservation Service	A CONTRACTOR AND A CONTRACTOR A	Weight Attributed and the state of the state	Const.	· Contig.	Ing. Services		ов общинательной применент в применент Применент в применент в при	
Floodwater Retarding Structure	Number	2 2/	manufactural production of the control of the contr	13,820	9,150	15,000	AND THE PROPERTY OF THE PROPER	37,970
Subwatershed Waterways	Mile	1.9 3/		A Proposition of the Control of the	1,000	Mark House Andrew	ekin-kazicz, roku-	1,000
Stream Cannel Improve- ment	Mile	4.48 4		2,000	1,500		Viet Abremant Earl or Constitution Constitut	3,500
SCS-Subtotal		and a second		15,820	11,650 1/	15,000	and the state of t	42,470
B-Measures - for conservat	ion of w	Non- Federal Public to flood preven	Private tion	Total				
Soil Conserva	tion Ser	vice		?	Howard Haragon		Common property of the	And the second s
GRAND TOTAL W	ATERSHED	PROTECTION	N	27,470	Afmany Post-year Housing	15,000	Acres - Acres	42,470
1/ Includes \$1000 estimate 2/ Structures Nos. 5 and 6 3/ Reaches WI-2, WI-3, WI-	•				періна склана і прийну рашинську відна	:		And the state of t
<u>l</u> Reaches C-1, C-4, C-6,	C-7				With the State of			ok i fremanski mingovinem ok
					e e e e e e e e e e e e e e e e e e e			Serie Advisoration
					1970 Elimbide Strong			III yaanaa Nagaala Co
					Marry Carry			
					4000000000			

TABLE A
STATUS OF PRIVATE COSTS
Obligations to be incurred
Upper Hocking Watershed Protection Project - Ohio

	Itemized Costs										
A Measures	Construction costs by Landowner	Clear. and Grub. Trees	Road resurfacing including guard rails and other incidentals	Relocation right- of-ways	Relocation Utilities	Fencing	Seeding	Construction costs contributed for Federal Contracts	Total		
Floodwater Retarding Structures NO. 3 No. 4 No. 5			2500	5000	500	in Section 2016 and the Sec	(Black Black College - Andrew - Malays at million - Alban Sharm	The state of the s	3000 5000		
No. 6 No. 8		# COMPAGE AND AND THE COMPAGE AND AND THE COMPAGE AND AND THE COMPAGE AND AND THE COMPAGE AND	2500 3350	1,000	500 2650	ACCIONNAL DESCRIPTION ACCIONANCE			3000 10,000		
No. 9 Stabilizing Control Structure - 15 structures	The control of the co	MATTICAL PROPERTY AND A STATE OF THE STATE O	The Contract of the Contract o	3688	1650	3977	1950		5338 5927		
Subwatershed Waterways 1.9 Mile	5280	2000	HAZDHACHSKITHSZONICZA KAZDA KAZA KAZ	бен-ий-ріййналіц Доорин пісав	стиносительная высотрудов.	There's pay age of the Laboratory and Laboratory an	75		7355		
Stream Channel Improvement	т не	8750	женей выпольной	4 месенти селения	\$\$ 1. POPPER OF THE STORY AND ADDRESS AND A LEAST	Disepent (Appent)		6080	14,830		
Total	5280	10,750	8350	12,688	5300	3977 ann	2025	6080 🛂	54,450		
y By trust fund	войска автра в в в в в в в в в в в в в в в в в в в	enous action eventure event prompted presentations	теннете петерительного петерительно	THE CLUBARY WITHOUT CASE WITHOU	mai ne de como de deservo de dese	Schwigelleichberteit (Anzelleury des Jeise	e of the trade scale sca				
deliberiusiaanaepusettytätääaalaise	э чени применения в применения	to be of Petrole dependent and a second second	The notes of the public of the	- tenhain bekah hamili galaming gipt Fizz	de orgáloxos inmentiar el mero en entre en entre en entre en en entre en entre en entre en entre en entre en e	elsügekensbörrendiktelsskrige 600	merifoldereitheit kemmen Einhaus zublichop	en Li Solamon populari con especial de la constante de la cons			

Insert in this space map showing proposed structural measures.

Figure 1 - Total Project - Structural Measures

Figure 2 - Structural Measures Installed to date.

Figure 3 - Structural Measures Remaining to be installed.

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