

*Please return to
Finley.*

THIS AGREEMENT, made and entered into this 30th day of November, 1917, in pursuance of the Act of Congress of June 17, 1902 (32 Stat., 388), and acts amendatory thereof and supplementary thereto, between the UNITED STATES OF AMERICA, hereinafter styled the United States, acting in this behalf by J. B. Bond, Project Manager, U. S. Reclamation Service, thereunto duly authorized, and the Klamath Drainage District, a public corporation duly organized and existing under the laws of the State of Oregon, with its principal place of business at Klamath Falls, Oregon, hereinafter styled the District.

WITNESSETH: That

WHEREAS the District proposes to reclaim by a process of drainage, evaporation and irrigation all of the lands within said district consisting of approximately 27,000 acres and being a part of the marsh or swamp lands lying within or adjacent to what is generally known as Lower Klamath Lake in Klamath County, Oregon, and Siskiyou County, California, east of the right of way of the California Northeastern Railway as it crosses said marsh or swamp lands, including a total area of approximately 54,000 acres; and

WHEREAS said Lower Klamath Lake is at certain seasons of the year fed with water from the Klamath River through a certain water way or channel known and herein designated as Klamath Strait, which passes under said railroad and through its embankment by means of an opening or culvert, which said opening or culvert has been so constructed as to permit the placing of gates therein for the purpose of controlling the flow of water through the same; and

WHEREAS the method of reclamation proposed by said District contemplates the closing of the gates in said Klamath Strait so as to exclude or control the further flow of water from the Klamath River into said Lower Klamath Lake and thereby to facilitate the reclamation of the lands mentioned; and

WHEREAS there are certain owners of marsh or swamp lands within or bordering on said Lower Klamath Lake who claim or may claim to have certain rights in or to the waters of said lake either as riparian owners or as appropriators of water therefrom, and particularly the Van Brimmer Ditch Company, which has or claims to have a vested water right in said lake of fifty (50) second feet, which is now, and for many years has been, according to said Company's claim, used for the irrigation of lands under its irrigation system, which rights may be affected by the lowering of the water level of said lake by the closing of the gates in said Klamath Strait, and all of which possible rights or claims must be taken into consideration in connection with the proposal to close the gates aforesaid; and

WHEREAS it is economically practicable to supply the said Van Brimmer Ditch Company the quantity of water necessary for the proper irrigation of the lands under and irrigable through its system from the Government's irrigation system known as the Klamath Project in lieu of the supply heretofore had and used by said Company from Lower Klamath Lake by adapting the distribution system of the Klamath Project to such a plan; and

WHEREAS the United States has heretofore expended sums of money, aggregating \$283,225.00, in making investigations as to the practicability and desirability of reclaiming said marsh or swamp lands and in the building of irrigation works for the storage, diversion, development and drainage of waters lying, being and flowing in and about said Klamath Project looking toward such reclamation and to the closing of Klamath Strait in connection therewith, and the United States has not been reimbursed for said expenditures or any part thereof; and

WHEREAS the district, in furtherance of its purpose to accomplish the reclamation of its lands, as aforesaid, desires the United States to close or operate the gates in the said Klamath Strait so as to prevent or regulate the further flow of the waters of the Klamath River on to said lands or into Lower Klamath Lake;

NOW, THEREFORE, in consideration of the premises and of the promises and covenants herein contained to be kept and performed, it is mutually covenanted and agreed between the parties hereto as follows:

1. The District agrees to deliver to the United States, simultaneously with the execution of this contract, duly executed waivers, in form satisfactory to the United States, from all riparian owners of lands in Oregon bordering on said Lower Klamath Lake, waiving claim or claims for any and all damages resulting or that may result, or be claimed to have resulted, to said lands, or to their owners, their heirs or assigns, by reason of said gates in Klamath Strait being closed. Waivers similar in purpose and form shall also be secured by the District

from the said Van Brimmer Ditch Company and delivered to the United States as hereinabove provided, together with a similar waiver executed by and on behalf of the District, all of which said waivers shall be recorded by and at the expense of the District within the County in which the respective lands lie.

2. It is understood and agreed that should the reclamation of said district lands in the manner herein contemplated prove impracticable or be not accomplished in reasonable compliance with the provisions hereof or interfere with the proper reclamation or use of public lands and it should be deemed by the United States necessary or desirable for the purpose of reclaiming or best utilizing the public lands within said marsh or swamp land area, as contemplated by the Oregon Act of January 20, 1905 (General Laws of Oregon, 1905, p. 63), and the California Act of February 3, 1905 (California Statutes, 1905, p. 4), to flood or overflow the same and to that end to open or regulate the gates in said Klamath Strait, the District will release and hereby does release and waive any and all claim for damages against the United States resulting, or that may be claimed to have resulted, to district lands by reason of their being returned on account of the opening of said gates to their normal condition as of the date hereof, or otherwise, it being the intention hereof that the District shall protect and save harmless the United States against claims of any kind which may arise from owners of or claimants to district lands on account of the execution of this agreement.

3. The District covenants, promises and agrees to pay to the United States, through the proper officer thereof duly designated to receive such payment, simultaneously with the execution of this contract, the sum of Twenty-three Thousand Five Hundred Dollars (\$23,500.00) in cash, to cover the cost incurred or that may be incurred by the United States in adapting the distribution system of the Klamath Project for the delivery of a water supply of fifty (50) second feet each season to the Van Brimmer Ditch Company in lieu of its present water right in that quantity in Lower Klamath Lake.

4. It is understood and agreed that the fifty (50) second feet of water to be furnished the Van Brimmer Ditch Company from the Klamath Project as hereinabove provided for shall be delivered by the United States to the Van Brimmer Ditch Company at the point where the canal known as the "South Branch Canal" of the Klamath Project intersects the canal known as the "North Lateral" of the system of the Van Brimmer Ditch Company, said point of intersection being near the northwest corner of the NE1/4 of Sec. 3, T. 41 S., R. 10 E., W. M., and that the United States will construct and install one turn-out on each side of said "South Branch Canal" at said point of intersection for delivery of water to said Company, said turn-outs to be and remain the property of the United States, its successors and assigns, and subject to operation and control exclusively by them.

5. It is further understood and agreed that for the purposes of this agreement the irrigation season during which water shall be furnished to the Van Brimmer Ditch Company as herein provided for shall be considered as extending from May first to October fifteenth, inclusive, of each year; provided that at the option of the United States water may be delivered to said company as early as April fifteenth in any year, upon written request to the United States by the duly authorized representative of the Company.

6. The District covenants, promises and agrees to assume and pay, and to that end hereby binds itself, its lands and property of every character, that proportion of the total expenditures heretofore made or to be made by or on behalf of the United States in connection with the proposed reclamation of Lower Klamath Lake marsh or swamp lands, including the \$23,500 named in paragraph 3 hereof and an additional sum of \$30,000 (being an agreed capitalization of the annual charges for the operation and maintenance of the canals and structures necessary for the delivery of the above mentioned fifty (50) second feet of water to the Van Brimmer Ditch Company), herein agreed to be \$283,225, that the total acreage of private or patented land included in said District, estimated as 20,000 acres, bears to the total acreage of said marsh or swamp lands within or marginal to Lower Klamath Lake, estimated at 54,000 acres, being $20/54$ of \$283,225, or the sum of \$104,898.15, which said sum shall be paid to the United States, its successors or assigns, as follows:

"23,500.00 on the execution of this contract

2,777.78 on December 1, 1918

2,777.78 " " 1919

2,777.78 " " 1920

2,777.78 " " 1921

4,636.03 " " 1926

6,565.10 " " 1927

6,565.10 " " 1928

6,565.10 " " 1929

6,565.10 " " 1930

6,565.10 " " 1931

6,565.10 " " 1932

6,565.10 " " 1933

6,565.10 " " 1934

6,565.10 " " 1935

6,565.10 " " 1936

The District also agrees to pay interest at the rate of eight per cent (8 per cent) per annum from the due date until paid on any and all payments accruing under the terms hereof and not paid when due. If it is ultimately determined that the total area of private or patented lands within the District exceeds 20,000 acres, as estimated at the date hereof, then the District agrees to pay upon such excess area at the same rate per acre as is hereby fixed for said 20,000 acres, such payment to be made with the final annual installment hereunder.

7. The United States covenants and agrees that upon the delivery to it by the District of the waivers against claims for damages as hereinabove provided and the payment by the District of the sum of Twenty-three Thousand Five Hundred Dollars (\$23,500), and upon the execution and approval of this contract the United States will cause the gates in said Klamath Strait to be closed and to be kept closed, except as herein otherwise provided, during the continuance of

this contract, barring acts of God and unavoidable accidents beyond the control of the United States; provided that the material and labor necessary for the closing thereof shall be provided by and at the expense of said District, the same to be installed under the direction of the Project Manager; provided further that the United States shall have and retain the right to open said gates at the times and in the manner prescribed and contemplated by paragraph 2 hereof free from claim or claims for damages by reason thereof; and provided further that should it at any time become advisable or necessary in the judgment of the District to convey water through said gates in connection with the reclamation of its lands the control of said gates shall in such case be under regulations prescribed by the United States.

8. It is further understood and agreed that the absolute and complete control of said gates in Klamath Strait shall be and remain in the United States until full and complete payment to the United States has been made of the same sum of \$283,225, with any accrued interest, whereupon control thereof may be surrendered by the United States upon such terms and conditions as may be mutually agreed upon by the United States and the occupants and owners of a majority of said 54,000 acres as herein designated.

9. It is further understood and agreed that the United States shall not be obligated to construct any portion of the system required for the irrigation or drainage of said, or any, marsh or swamp lands, nor to operate or maintain such works, nor to expend any further sums toward the reclamation of said marsh or swamp lands, nor does the United States assume any responsibility for the success of their reclamation.

10. This contract shall be binding on the parties hereto only upon the approval hereof by the Director of the United States Reclamation Service.

11. No interest in this agreement shall be transferred by the District to any other party without the written consent of the United States, and any such transfer shall cause annulment of the contract so far as the United States is concerned; all rights of action, however, for breach of this contract are reserved to the United States, as provided by section 3737, Revised Statutes of the United States.

12. No Member of or Delegate to Congress, or Resident Commissioner after his election or appointment, or either before or after he has qualified and during his continuance in office, and no officer, agent, or employee of the Government, shall be admitted to any share or part of this contract or agreement, or to any benefit to arise thereupon. Nothing, however, herein contained shall be construed to extent to any incorporated company, where such contract or agreement is made for the general benefit of such incorporation or company, as provided in section 116 of the act of Congress approved March 4, 1909 (35 Stat. L., 1109).

13. IN WITNESS WHEREOF this instrument has been executed on behalf of the Klamath Drainage District by its duly elected, qualified and acting President and Secretary, respectively, thereunto duly authorized by resolution of its board of directors dated November 13, 1917, a certified copy of which is hereto attached, and on behalf of the UNITED STATES OF AMERICA by its duly authorized officer the day and year first above written.

Signed, sealed and delivered in the presence of us as witnesses:

UNITED STATES OF AMERICA

By _____

KLAMATH DRAINAGE DISTRICT

By _____
President

By _____
Secretary

THIS AGREEMENT, made and entered into this 30th day of November, 1917, in pursuance of the Act of Congress of June 17, 1902 (32 Stat., 388), and acts amendatory thereof and supplementary thereto, between the UNITED STATES OF AMERICA, hereinafter styled the United States, acting in this behalf by J. B. Bond, Project Manager, U. S. Reclamation Service, thereunto duly authorized, and the Klamath Drainage District, a public corporation duly organized and existing under the laws of the State of Oregon, with its principal place of business at Klamath Falls, Oregon, hereinafter styled the District.

WITNESSETH: That

WHEREAS the District proposes to reclaim by a process of drainage, evaporation and irrigation all of the lands within said district consisting of approximately 27,000 acres and being a part of the marsh or swamp lands lying within or adjacent to what is generally known as Lower Klamath Lake in Klamath County, Oregon, and Siskiyou County, California, east of the right of way of the California Northeastern Railway as it crosses said marsh or swamp lands, including a total area of approximately 54,000 acres; and

WHEREAS said Lower Klamath Lake is at certain seasons of the year fed with water from the Klamath River through a certain water way or channel known and herein designated as Klamath Strait, which passes under said railroad and through its embankment by means of an opening or culvert, which said opening or culvert has been so constructed as to permit the placing of gates therein for the purpose of controlling the flow of water through the same; and

WHEREAS THE METHOD OF RECLAMATION PROPOSED BY SAID District contemplates the closing of the gates in said Klamath Strait so as to exclude or control the further flow of water from the Klamath River into said Lower Klamath Lake and thereby to facilitate the reclamation of the lands mentioned; and

WHEREAS there are certain owners of marsh or swamp lands within or bordering on said Lower Klamath Lake who claim or may claim to have certain rights in or to the waters of said lake either as riparian owners or as appropriators of water therefrom, and particularly the Van Brimmer Ditch Company, which has or claims to have a vested water right in said lake of fifty (50) second feet, which is now, and for many years has been, according to said Company's claim, used for the irrigation of lands under its irrigation system, which rights may be affected by the lowering of the water level of said lake by the closing of the gates in said Klamath Strait, and all of which possible rights or claims must be taken into consideration in connection with the proposal to close the gates aforesaid; and

WHEREAS it is economically practicable to supply the said Van Brimmer Ditch Company the quantity of water necessary for the proper irrigation of the lands under and irrigable through its system from the Government's irrigation system known as the Klamath Project in lieu of the supply heretofore had and used by said Company from Lower Klamath Lake by adapting the distribution system of the Klamath Project to such a plan; and

WHEREAS the United States has heretofore expended sums of money, aggregating \$283,225.00, in making investigations as to the practicability and desirability of reclaiming said marsh or swamp lands and in the building of irrigation works for the storage, diversion, development and drainage of waters lying, being and flowing in and about said Klamath Project looking toward such reclamation and to the closing of Klamath Strait in connection therewith, and the United States has not been reimbursed for said expenditures or any part thereof, and

WHEREAS the district, in furtherance of its purpose to

accomplish the reclamation of its lands, as aforesaid, desires the United States to close or operate the gates in the said Klamath Strait so as to prevent or regulate the further flow of the waters of the Klamath River on to said lands or into Lower Klamath Lake;

NOW, THEREFORE, in consideration of the premises and of the promises and covenants herein contained to be kept and performed, it is mutually covenanted and agreed between the parties hereto as follows:

1. The District agrees to deliver to the United States, simultaneously with the execution of this contract, duly executed waivers, in form satisfactory to the United States, from all riparian owners of lands in Oregon bordering on said Lower Klamath Lake, waiving claim or claims for any and all damages resulting or that may result, or be claimed to have resulted, to said lands, or to their owners, their heirs or assigns, by reason of said gates in Klamath Strait being closed. Waivers similar in purpose and form shall also be secured by the District from the said Van Brimmer Ditch Company and delivered to the United States as hereinabove provided, together with a similar waiver executed by and on behalf of the District, all of which said waivers shall be recorded by and at the expense of the District within the County in which the respective lands lie.

2. It is understood and agreed that should the reclamation of said district lands in the manner herein contemplated prove impracticable or be not accomplished in reasonable compliance with the provisions hereof or interfere with the proper reclamation or use of public lands and it should be deemed by the United States necessary or desirable for the purpose of reclaiming or best utilizing the public lands within said marsh or swamp land area, as contemplated by the Oregon Act of January 20, 1905 (General Laws of Oregon, 1905, p. 63), and the California Act of February 3, 1905 (California Statutes, 1905,

p. 4), to flood or overflow the same and to that end to open or regulate the gates in said Klamath Strait, the District will release and hereby does release and waive any and all claim for damages against the United States resulting, or that may be claimed to have resulted, to district lands by reason of their being returned on account of the opening of said gates to their normal condition as of the date hereof, or otherwise, it being the intention hereof that the District shall protect and save harmless the United States against claims of any kind which may arise from owners of or claimants to district lands on account of the execution of this agreement.

3. The District covenants, promises and agrees to pay to the United States, through the proper officer thereof duly designated to receive such payment, simultaneously with the execution of this contract, the sum of Twenty-three Thousand Five Hundred Dollars (\$23,500.00) in cash, to cover the cost incurred or that may be incurred by the United States in adapting the distribution system of the Klamath Project for the delivery of a water supply of fifty (50) second feet each season to the Van Brimmer Ditch Company in lieu of its present water right in that quantity in Lower Klamath Lake.

4. It is understood and agreed that the fifty (50) second feet of water to be furnished the Van Brimmer Ditch Company from the Klamath Project as hereinabove provided for shall be delivered by the United States to the Van Brimmer Ditch Company at the point where the canal known as the "South Branch Canal" of the Klamath Project intersects the canal known as the "North Lateral" of the system of the Van Brimmer Ditch Company, said point of intersection being near the northwest corner of the NE1/4 of Sec. 3, 5. 41 S., R. 10 E., W. M., and that the United States will construct and install one turn-out on each side of said "South Branch Canal" at said point of

intersection for delivery of water to said Company, said turn-outs to be and remain the property of the United States, its successors and assigns, and subject to operation and control exclusively by them.

5. It is further understood and agreed that for the purposes of this agreement the irrigation season during which water shall be furnished to the Van Brimmer Ditch Company as herein provided for shall be considered as extending from May first to October fifteenth, inclusive, of each year; provided that at the option of the United States water may be delivered to said company as early as April fifteenth in any year, upon written request to the United States by the duly authorized representative of the Company.

6. The District covenants, promises and agrees to assume and pay, and to that end hereby binds itself, its lands and property of every character, that proportion of the total expenditures heretofore made or to be made by or on behalf of the United States in connection with the proposed reclamation of Lower Klamath Lake marsh or swamp lands, including the \$23,500 named in paragraph 3 hereof and an additional sum of \$30,000 (being an agreed capitalization of the annual charges for the operation and maintenance of the canals and structures necessary for the delivery of the above mentioned fifty (50) second feet of water to the Van Brimmer Ditch Company), herein agreed to be \$283,225, that the total acreage of private or patented land included in said District, estimated as 20,000 acres, bears to the total acreage of said marsh or swamp lands within or marginal to Lower Klamath Lake, estimated at 54,000 acres, being 20/54 of \$283,225, or the sum of \$104,898.15, which said sum shall be paid to the United States, its successors or assigns, as follows:

| | |
|-----------|-----------------------------------|
| 23,500.00 | on the execution of this contract |
| 2,777.78 | on December 1, 1918 |
| 2,777.78 | " " " 1919 |
| 2,777.78 | " " " 1920 |
| 2,777.78 | " " " 1921 |
| 4,636.03 | " " " 1926 |
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| 6,565.10 | " " " 1932 |
| 6,565.10 | " " " 1933 |
| 6,565.10 | " " " 1934 |
| 6,565.10 | " " " 1935 |
| 6,565.10 | " " " 1936 |

104,898.15

The District also agrees to pay interest at the rate of eight per cent (8 per cent) per annum from the due date until paid on any and all payments accruing under the terms hereof and not paid when due. If it is ultimately determined that the total area of private or patented lands within the District exceeds 20,000 acres, as estimated at the date hereof, then the District agrees to pay upon such excess area at the same rate per acre as it hereby fixed for said 20,000 acres, such payment to be made with the final annual installment hereunder.

7. The United States covenants and agrees that upon the delivery to it by the District of the waivers against claims for damages as hereinabove provided and the payment by the District of the sum of Twenty-three Thousand Five Hundred Dollars (\$23,500), and upon the execution and approval of this contract the United States will cause the gates in said Klamath Strait to be closed and to be kept closed, except as herein otherwise provided, during the continuance of this contract, barring acts of God and unavoidable accidents beyond the control of the United States; provided that the material and labor necessary for the closing thereof shall be provided by and at the expense of said District, the same to be installed under the direction of the Project Manager; provided

further that the United States shall have and retain the right to open said gates at the times and in the manner prescribed and contemplated by paragraph 2 hereof free from claim or claims for damages by reason thereof; and provided further that should it at any time become advisable or necessary in the judgment of the District to convey water through said gates in connection with the reclamation of its lands the control of said gates shall in such case be under regulations prescribed by the United States.

8. It is further understood and agreed that the absolute and complete control of said gates in Klamath Strait shall be and remain in the United States until full and complete payment to the United States has been made of the same sum of \$283,225, with any accrued interest, whereupon control thereof may be surrendered by the United States upon such terms and conditions as may be mutually agreed upon by the United States and the occupants and owners of a majority of said 54,000 acres as herein designated.

9. It is further understood and agreed that the United States shall not be obligated to construct any portion of the system required for the irrigation or drainage of said, or any, marsh or swamp lands, nor to operate or maintain such works, nor to expend any further sums toward the reclamation of said marsh or swamp lands, nor does the United States assume any responsibility for the success of their reclamation.

10. This contract shall be binding on the parties hereto only upon the approval hereof by the Director of the United States Reclamation Service.

11. No interest in this agreement shall be transferred by the District to any other party without the written consent of the United States, and any such transfer shall cause annulment of the

contract so far as the United States is concerned; all rights of action, however, for breach of this contract are reserved to the United States, as provided by section 3737, Revised Statutes of the United States.

12. No Member of or Delegate to Congress, or Resident Commissioner after his election or appointment, or either before or after he has qualified and during his continuance in office, and no officer, agent, or employee of the Government, shall be admitted to any share or part of this contract or agreement, or to any benefit to arise thereupon. Nothing, however, herein contained shall be construed to extend to any incorporated company, where such contract or agreement is made for the general benefit of such incorporation or company, as provided in section 116 of the act of Congress approved March 4, 1909 (35 Stat. L., 1109).

13. IN WITNESS WHEREOF this instrument has been executed on behalf of the Klamath Drainage District by its duly elected, qualified and acting President and Secretary, respectively, thereunto duly authorized by resolution of its board of directors dated November 13, 1917, a certified copy of which is hereto attached, and on behalf of the UNITED STATES OF AMERICA by its duly authorized officer the day and year first above written.

Signed, sealed and delivered in the presence of us as witnesses:

UNITED STATES OF AMERICA

By _____

Klamath Drainage District

By _____
President

By _____
Secretary

State of Oregon)
County of Klamath (ss.
)

THIS CERTIFIES that on this _____ day of _____, 1917, before me, the undersigned, _____, a Notary Public in and for said County and State, personally appeared the within named _____ and _____, President and Secretary, respectively, of the within named Klamath Drainage District, a corporation, and they being known to me to be such officers and the identical persons described in and who executed the within instrument for and on behalf of the said corporation, and said corporation being known to me to be the identical corporation for and on whose behalf the said instrument was executed, and said

_____ and _____ did then and there acknowledge to me that they did as such officers as in this certificate described execute the said instrument as and for the act and deed of said corporation in whose name and behalf they executed said instrument, and affixed thereto the corporate seal of said corporation, under authority in them vested by the Board of Directors of said corporation.

WITNESS my hand and Notarial seal the day and year last aforesaid.

Notary Public for Oregon.

My commission expires _____

(Seal).

BIRD RESERVE TO BE OPENED

President Signs Bill to Open Thousands of Acres Rich Land to Soldiers.

House Resolution number 8440 providing that the lands around the Lower Klamath Lake lying in Siskiyou County, California, and Klamath County, Oregon, shall be open to entry by soldiers of the World War and the area of the bird reserve which includes these lands shall be cut down to include only the lake waters and the shore line, has been approved by the president and becomes a law.

Legislation for the opening of the part of the bird reserve not included in the open water has been pending for several years in one form and another, but the many complications prevented action until this time.

The good lands to be opened for entry are mostly tule lands that have become dry lands since the gates at the straits at Ady have been closed. These lands will be very valuable and at one time the State of California set up a strong claim to the lands on the plea that the State ceded to the United States only the lands of the lake bed and that it was not the intention of the State to cede tule lands that are dry a part of the year. The State's contention has been pretty well threshed out before the department, and this bill is an indication that the interior department considers the ownership of the lands in question vested in the United States.

The amount of the land to be thrown open to entry will be determined as well as the amount of the land that will be retained in the bird reserve by the Secretary of the Interior. The date of the opening will also be determined by the department. At this time there is no intimation when that will be, but those interested hope the surveys can be completed and the land opened for settlement early next year.

The following quotations from the law as passed will be of interest both to the prospective homesteaders and to those who were interested in the State of California getting the land back:

Quotations from Existing Laws

When the lands around the lakes of Northern California and Southern Oregon were cede to the United States, the legislatures of both States passed laws in reference to the matter. The ceding act passed by California contained the following language:

"An act authorizing the United States government to lower the water levels of any or all of the following lakes: Lower or Little Klamath Lake, Tule or Rhett Lake, Goose Lake and Clear Lake, situated in Siskiyou and Modoc Counties, and to use any part or all of the beds of said lakes for the storage of water in connection with the irrigation and reclamation operations conducted by the Reclamation Service of the United States, all right, title, interest, or claim of the State of California to arid lands uncovered by the lowering of the water levels of any or all of said lakes not already disposed of by the State."

The act by which the lands were ceded by the State of Oregon contained the following language:

"An act to authorize the utilization of Upper Klamath Lake, Lower or Little Klamath Lake, and Tule or Rhett Lake, situate in Klamath County, Oregon, and Goose Lake, situate in Lake County, Oregon, in connection with the irrigation and reclamation operations of the Reclamation Service of the United States, and to cede to the United States all right, title, interest and claim of the State of Oregon to any and all lands recovered by the lowering of the water levels or by drainage of any or all of said lakes."

The present act states that these lands to be opened will be subject to homestead entry and gives the government prior right to the lands for irrigation and drainage to pay his proportion of the reclamation fund now charged to the lands which amount in the aggregate to \$283,225.00 which has already been expended. It is generally understood that this charge is to be borne equally by 54,000 acres which would be a charge of about \$6.00 per acre. This money is to be paid in installments of one dollar per acre per annum, the first installment being paid at the time of filing on the land.

Klamath Falls Herald, June 25, 1920 --

BIRD RESERVE TO BE OPENED

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Legislation for the opening of the part of the bird reserve not included in the open water has been pending for several years in one form and another, but the many complications prevented action until this time.

The good lands to be opened for entry are mostly tule lands that have become dry lands since the gates at the straits at Ady have been closed. These lands will be very valuable and at one time the State of California set up a strong claim to the lands on the plea that the State ceded to the United States only the lands of the lake bed and that it was not the intention of the State to cede tule lands that are dry a part of the year. The State's contention has been pretty well threshed out before the department, and this bill is an indication that the interior department considers the ownership of the lands in question vested in the United States.

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"An act authorizing the United States government to lower the water levels of any or all of the following lakes: Lower or Little Klamath Lake, Tule or Rhett Lake, Goose Lake and Clear Lake, situated in Siskiyou and Modoc Counties, and to use any part or all of the beds of said lakes for the storage of water in connection with the irrigation and reclamation operations conducted by the Reclamation Service of the United States, all right, title, interest, a claim of the State of California to arid lands uncovered by the lowering of the water levels of any or all of said lakes not already disposed of by the State."

The act by which the lands were ceded by the State of Oregon contained the following language:

"An act to authorize the utilization of Upper Klamath Lake, Lower or Little Klamath Lake, and Tule or Rhett Lake, situate in Klamath County, Oregon, and Goose Lake, situate in Lake County, Oregon, in connection with the irrigation and reclamation operations of the Reclamation Service of the United States, and to cede to the United States all right, title, interest and claim of the State of Oregon to any and all lands recovered by the lowering of the water levels or by drainage of any or all of said lakes."

The present act states that these lands to be opened will be subject to homestead entry and gives the government prior right to the lands for irrigation and drainage to pay his proportion of the reclamation fund now charged to the lands which amount in the aggregate to \$283,225.00 which has already been expended. It is generally understood that this charge is to be borne equally by 54,000 acres which would be a charge of about \$6.00 per acre. This money is to be paid in installments of one dollar per acre per annum, the first installment being paid at the time of filing on the land.

The VOLT

(REG. U. S. PAT. OFF.)



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FOREWORD: The wildfowl nurseries in Klamath County, Oregon, are outstanding features of this region. The VOLT believes that they are of primary commercial consequence to it—even when one takes into consideration Klamath County's magnificent stands of timber, its lumber-manufacturing activities, its herds of beef and dairy stock, its sheep and swine, its rapidly increasing alfalfa acreage, its hydroelectric development and potentialities, or whatever else of commercial or other significance that might be cited.

The years to come will prove if our estimate of the value of these wildfowl refuges is correct. Nowhere else in the whole United States, save perhaps in inaccessible swamps or on islands along the shores of states bordering on the Gulf of Mexico, is there anything comparable with the refuges and breeding grounds of the Klamath Lake region. With the growing general interest in Nature study that is part of America's out-of-doors recreational movement, these bird nurseries are destined to delight thousands with whom the study of bird life is not professional.

Meanwhile, this issue of The VOLT affords its readers opportunity to indulge in an expedition, second-handed, to this wonderland, taken first-handed by the Finleys, whose writings and photographs of bird life have gained them more than a national reputation.

Conservation of the rapidly disappearing wild life of this country, especially its birds, is Mr. Finley's life work. As a lecturer for the National Association of Audubon Societies of America, as a writer and photographer, he is a leader in his chosen field of endeavor. First of all an educator, he is also an entertainer of the first order; but it is the coming generations who will be most indebted to Naturalist Finley for the unremitting battle he is waging in the interest of bird life in America.

Bird Life in Klamath County

By William L. and Irene Finley of the
National Association of Audubon Societies

IF one were to write an adequate story of bird life in the Klamath country, it would require a volume instead of a single chapter. He would have to tell of over two hundred different species that live in the forests, along the lakes and rivers, and out into the fields and sage-brush plains. It would begin with the little Calliope hummingbird, the tiniest mite in feathers found in the United States, which lives in the pine-timbered belt of Klamath, and end with the broad-winged American or bald eagle with its aery in the tallest pine on the Upper Klamath Lake.

In the high mountains are the Clark nutcracker, Lewis woodpecker and western tanager, three birds first discovered on the Lewis and Clark Expedition, together with a variety of woodpeckers, chickadees, creepers, nuthatches, and others that police the pine forests for insects. Along the streams, in the deeper woods, about the fields and farms, is a long list of the best songsters of the country, such as thrushes, wrens, vireos, sparrows, orioles, meadowlarks and chats.

Klamath County is perhaps best known (to ornithologists) for its wide variety of water fowl. Here are numerous ducks, in-

cluding mallards, pintails, canvasbacks, gadwalls, mergansers, cinnamon teal and ruddy ducks. The marshes are also the homes of Canada geese, sandhill cranes, bitterns, coots and rails. Along the mud flats are avocets, stilts, phalaropes, snipe, killdeer and other waders. On the lakes are colonies of numberless gulls, night herons and great blue herons, cormorants, grebes, terns and pelicans. I have seen the marshes white with the nesting multitudes.

The lure of cruising the wide marshes along the Klamath River is an experience I can never forget. We cruised from Klamath Falls down the winding river. One might not expect to find many song birds in the tules, yet this is a favorite nesting place for tule wrens, yellow-throat warblers and song sparrows. Red-winged and yellow-headed blackbirds fluttered in and out and swung on the bending tops of tall canes. An old yellow-head begins his song like the peeping of a young duck. His tail spreads and his throat swells and his performance grows more violent until it ends with a contortion like the complaint of an old setting hen when she is disturbed.

We soon came near a place where a bit-tern was pumping. He was a ventriloquist, for when I thought he was twenty feet away, I still sneaked fifty feet nearer. "Punk-a-lunk! Punk-a-lunk!" he said. But this pumping was only the end of his call. The beginning was a "Blub! Blub!" like water bubbling into a big empty cask. I pulled myself along by the overhanging tules. The minute he saw me, he flapped up and away with a frightened "Quork!"

At the next bend in the river, I waded out through two feet of water to a small grassy island in the midst of the swamp. Suddenly a female mallard flushed from between my feet. So close do the ducks sit that I had straddled the nest with ten eggs before the mother flapped off through the grass, trying to lure me away. It is not easy to find ducks' nests because of this trait of the mother in freezing so close. Yet in the space of two or three acres, we found the home of two mallards, three pintails and a cinnamon teal.

We camped that night on a little flat where a variety of wading birds were nesting. We saw avocets, a bird about the size of a pigeon with slender legs and a long bill that curves up a little at the end. He is sometimes called the brown curlew. He is recognized by the beautiful red-brown markings on his head, neck and chest, and his black and white wings. The black-necked stilt is well named because he looks as if he has extensions on his legs; they are so long and slender. The back of his head, neck and shoulders are greenish-black, while the under part of his neck and breast are pure white. The killdeer is a little plover, so named because of his call. While we were getting supper, the avocets swooped past with loud "Whit-whit-ie! Whit-whit-ie!" Stilts were crying "Quit! Quit!" loud and fast, and killdeers running about and flapping in great distress. They kept crying long after we had crawled into our blankets and well into the night. The reason was, there were four nests of the killdeer and five of the stilts and avocets near where we had camped.

Toward evening, the ducks came in from the lake in bands and settled down for the night where the reedy bogs lay scattered about and water was shallow. At dusk, we lay in camp and listened to the rush of wings as the night-comers flocked into their nesting places. We could catch the faintest whirr at first, which increased to a loud swish as the band passed. Out on the water, came the light flappings as flock after flock settled for the night.

The bird life of Upper Klamath Lake and marshes is like a great outdoor museum. The Upper Lake is a great feeding and resting lake, but for some reason it has not been a breeding place for the colonies of birds such as the Lower Klamath before it was dried up. In 1905, when we first cruised the Lower Klamath Lake, it was a vast breeding ground for wild fowl. Extending for several miles out from the main shore, was a seemingly

endless area of floating tule islands between which flowed a network of channels. On these islands lived great colonies of ring-billed and California gulls, Caspian terns, Farallone cormorants and white pelicans. Around the borders of the islands, western or swan grebes built their nests by the hundreds and thousands. Through the tule marsh, were black and Forster terns, American coots, pied-billed grebes and different varieties of ducks and Canada geese.

It was an interesting sight to approach the great bird colonies that lived on the Lower Klamath. We were led to the nesting places by watching the course of small flocks that spread out over the lake in the morning and returned homeward toward evening. With our field glass, we could see the gulls a mile away rising and circling over a low-lying island. As we rowed nearer, the birds came out to meet us, cackling excitedly at the dubious looking craft approaching their homes. They swam about on all sides and followed in the wake of our boat. Cormorants flapped along over the surface, pelicans rose heavily from the water and gulls and terns got thicker and thicker until, when the nose of the boat pushed in at the edge of the island, the air seemed completely filled with the crying, chaotic swarm. We stepped out on the tules, but had to tread cautiously to keep from breaking eggs or killing young birds. Many youngsters crouched low in their tracks, others scuttled off in all directions. In order to get photographs in the colonies, we built a blind for the camera, covering it with tules. After getting under cover, the colony settled back to its normal condition; the blind passed as a part of the surroundings, and through a loop-hole we shot as many birds as we pleased.

The gulls loved society. They always nest in colonies and live together the entire year. They are birds of great economic value because during the summer time they live largely on grasshoppers. They fly out over the fields and sage-brush and gorge themselves on these pests. During the winter, they seek the coast lines and are most useful birds about the waterfronts of our cities where they keep the beaches and harbors free from waste food that is thrown out.

The western or swan grebe is a diving bird of glistening-white breast and silvery-gray back. For a home, it collects dry tule stems and builds a raft on the surface of the water. It is one of the shyest of all birds to photograph, because it dives at the slightest sound or motion. When the eggs hatch, the chicks leave home after a few hours and are accustomed to ride around on the backs of the parents. The little ones have a way of lying on the back just under the wing coverts with only their heads sticking out. Occasionally the parent picks up bits along the surface and reaching back, feeds her babies. The old birds can dive readily and at the same time hold the little ones safely on the hurricane deck.



The VOLT

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3

The white pelican is the largest and showiest water fowl of the Klamath country. No ship will ever sail the skies with the grace and beauty of the white pelican. The wings are partly black in color; they make a showy contrast to the spotless white of the body. These birds have a way of swinging around in majestic circles higher and higher until the whole flock looks like a flurry of snowflakes in a clear blue sky. When the promenade is ended, the birds coast earthward on rigid, half-closed wings, tobogganing out of the heavens like meteors, leaving trails of thunder at their tails.

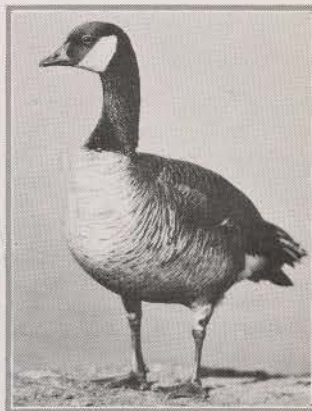
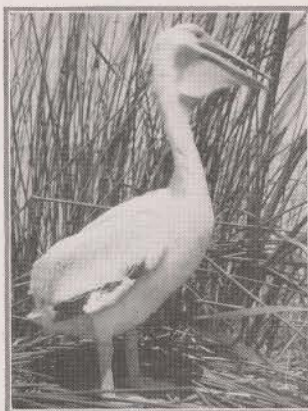
The big white pelican is like a primitive bird. The Klamath with all its bird mysteries has no other sight to compare with it. Before the breeding season, both male and female have a horny growth on the upper part of the bill that looks like the center board on the bottom of a boat. No one knows just what this is for, unless it is a relic of past ages. It loosens and drops off during the breeding season just as the antlers of a deer are shed.

A baby pelican is very different from the nestlings of ducks, geese and wading birds, which are able to move around and hunt food a day or two after they are out of the shell. The pelican is born naked and helpless and has to be kept warm and be fed by his parents. It takes about a month and a half before he gets a good coat of white down and can move around and mingle with the neighboring birds. One might wonder how a huge-billed bird like the pelican could feed a helpless chick just out of the egg. It is done with apparent ease. The old bird regurgitates a fishy soup into the front end of her

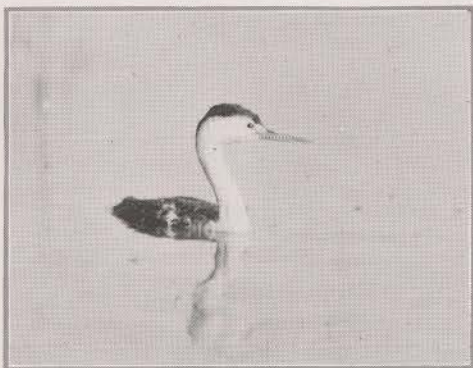
pouch and the little pelicans dip in and help themselves out of this family dish.

In the past, the birds of Klamath County have been a factor in its development. Back in the 'nineties when market hunting was in vogue, a hundred and twenty tons of ducks were shipped from this section during one winter season to the San Francisco markets. The plumage of untold thousands of grebes, terns and other beautiful birds were sent to the millinery markets of New York and Paris. The days of the market- and plume-hunters have passed into the period of the sportsman and tourist. Each year more wild land is brought under cultivation; swamps, ponds and lakes are drained; forests are cut and fields fenced. These activities are of great importance to the state. As Klamath County develops, if some attention is paid to nesting, feeding and resting refuges for our wild birds, their variety and number can be retained even under the change of conditions. Klamath County is one of the great out-door lands of the West. Conserving its remarkable bird life will prove a valuable future asset for a desirable class of tourists who have money to spend and money to invest.

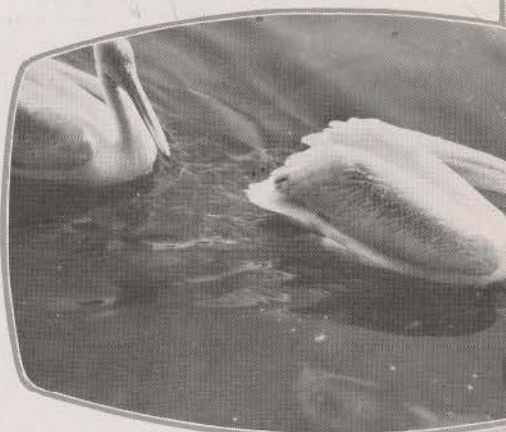
In a most earnest letter to this publication, District Forester Paul G. Redington says: "California is facing one of the most serious fire situations in its history. Not for years have our fields and forests been the 'tinder-box' that they are today. A combination of weather factors has brought about a trying condition and the stage is all set for some tremendous conflagrations. More than 400 fires, covering 30,000 acres, have already occurred this year within and adjacent to the National Forests . . . and our regular fire season is just beginning." Need more be quoted? Vacationists, do your part—HELP PREVENT FOREST FIRES—be as careful with fire in the woods as you would be in your own home.



From left to right: an almost mature White Pelican, an American Avocet, and a Canada Goose or Honker. Photos by William L. Finley and H. T. Bohlman.



Western or Swan Grebe, photo by William L. Finley and H. T. Bohlman. The swimming Pelicans on the right, a copyrighted photo reproduced through courtesy of R. E. Stinson, Klamath Falls.



Young Pelicans, sturdy and downy. A month and a half after hatching, Naturalist Finley informs us, finds these chicks covered with a good coat of down and able to move about in the pelicanery. Photo by Ray Telford.



On Bird Island, Clewiston, wildfowl reservation, and adult Cormorant life, each species, a group.



White Pelicans, adults and young. This remarkable picture, a Finley-Bohlman photograph, is a 100-per cent demonstration of camera craft.



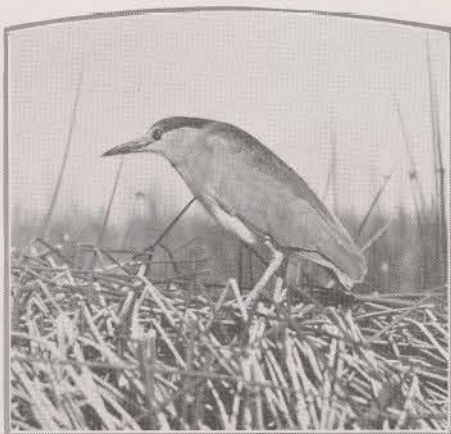
White Pelicans, adults and young. As shown here, the half-grown young and Pelicans lead a community life, however, maintaining its respective territory. Photo by J. J. Furber.



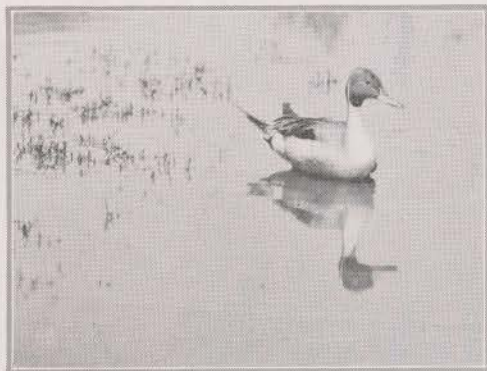
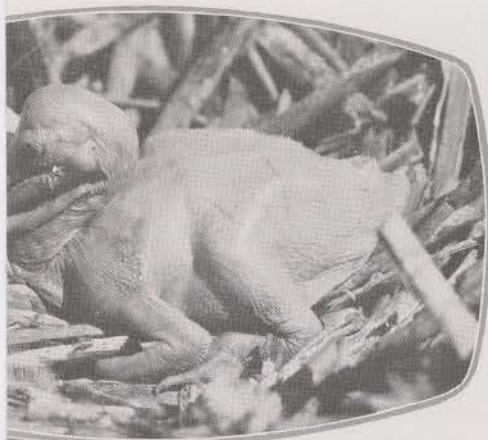
Drake Mallard on parade. This species of wild-duck is progenitor of the barnyard variety. Photo by Cook, Klamath Falls.



Nestlings of the Black-crowned Night-heron known to young America as the Squab. Photo by Ray Telford. The black-capped bird on left are adult Caspian Terns. Photo by Finley and H. T. Bohlman.



From left to right: a young Caspian Tern, a Black-crowned Night-heron, and a California Gull and young. Photos by William L. Finley and H. T. Bohlman.



A male Pintail or Sprig, and his reflection, as recorded by Messrs. Finley and Bohlman. The very young Pelican, depicted on the left, was photographed by Ray Telford.



White Pelican, commonly known, photographed in the upper left by William L. Finley.



White Pelicans and California Gulls rising from breeding grounds near Clear Lake, Modoc County, California, across the state line from Klamath County, Oregon. Photo by Bert C. Thomas.

Radu Zalk - from James Anderson
May - Jan 1925
Mersey (circled)
①

The past and present policy of the Reclamation Service of the Department of the Interior in southern Oregon and northern California has been very destructive to wild life resources.

③ A part of this destruction comes from drying up swamps and lakes, the ancestral resting, breeding, and feeding areas of ducks, geese, and other migratory water fowl. This may be justified on the basis of developing more important uses of land and water for the public benefit.

On the other hand, acts not essential to irrigation and reclamation, that show unnecessary destruction of one public resource in developing another, cannot be justified.

14 months The reclamation projects established in different western states created reservoirs or large bodies of water, some combined with swamp areas, which were recognized as advantageous sanctuaries for water fowl. In certain cases, all or parts of these areas have been created by Special Executive Proclamations as wild bird reservations. The Presidential orders establishing these sanctuaries provide against the destroying of nests and eggs, or hunting or disturbing birds.

The Reclamation Service has priority rights in the development of certain lands and waters in the above mentioned district. The Biological Survey of the Department of Agriculture has secondary rights in protecting and developing the wild life resources on the lands and waters of this district.

(Our complaint is that) there has been and at present exists a lack of co-ordinating the work of these two federal departments both spending public funds. The acts of the Bureau of Reclamation

have nullified the services of the Biological Survey.

Mr. R. The result has been a very great destruction of water fowl that could have been prevented.

Mr. P. Therefore, we feel that the rights of the Biological Survey in preserving wild fowl, although secondary, should be recognized.

A number of cases may be presented where the Reclamation Service is destroying bird life on federal wild fowl reservations as a result of adopting a policy which is not essential to successful irrigation and reclamation. This policy has been the leasing of these federal reservations where birds nest and feed to livestock owners for grazing purposes.

Clear Lake may be given as an example. It lies in Modoc County, northern California, and was created a bird sanctuary by Executive Order, April 11, 1911. Originally it was a body of water about eight by ten miles. All around the border of the lake was natural plant life where different species of ducks and many Canada geese were nesting. The sagebrush areas around the border were the breeding places of many sage hens. The value of this sanctuary lay in the number and variety of bird life, and its distance from any settled area.

The waters of the lake have now been lowered to the limit, leaving a large part of the old lake bed uncovered. Of these uncovered lands, the Reclamation Service has signed four leases turning over 14,120 acres of the reservation to stockmen. The average price received was about twenty-five cents per acre per year. These leases started in 1931. At first the flocks of sheep not only grazed off the natural vegetation, but tramped through colonies of birds, destroying the nestlings.

Upon complaint of the Biological Survey, any leases now authorized by the Bureau of Reclamation forbid grazing between April 1 and July 1. While this may prevent tramping out of the nests of birds, it destroys all of the natural cover necessary for bird life.

Req. (A few months ago I wrote to Mr. Elwood Mead, Commissioner of Reclamation, about this destruction of bird life. His response was a report written by B. E. Hayden, Chief Engineer in charge of the Project. ^{claim} (His claim) is that formerly range stock had free access to the grass and weeds that grew along the water's edge. Therefore, it was leased to stockmen in return for cash revenues as follows. From 1931 to 1934, \$9552.57 were received by the Reclamation Service and were applied to the construction charges, or costs of the districts affected.

Mr. Hayden's report states that "the Reclamation Bureau might well entertain some reasonable proposition from the Biological Survey where the Survey would compensate the settlers for the agreed loss of revenue, and the Survey then be permitted to fence the entire lake or any portion thereof for the complete exclusion of stock, due provision being made for stock lanes to accomodate range cattle and sheep."

The Reclamation Service in conjunction with the Biological Survey has full power and authority to keep range stock off this reservation as a protection to bird life.

The suggestion that one department of the government pay another department of the government for the rights to conserve a natural resource is an absurdity. It shows a lack of co-ordinating the work of two bureaus, both dealing with important public resources. Why should the Biological Survey pay the settlers on the Clear Lake Project for the privilege of preserving bird life on federal lands

set aside for this purpose by the President of the United States?

The Bureau of Reclamation could greatly assist in wild fowl protection and restoration by cancelling its leases and stopping the grazing of livestock on federal bird reservations. The sum of money received for grazing rights on sanctuaries does not compensate for the amount of destruction. Leases to stockmen are not a service essential to irrigation or reclamation. Reclamation officials in the Klamath district have promoted the uses of land and water, but have been unmindful of the protection and development of wild life resources.

C O P Y

DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
WASHINGTON

January 30, 1926.

MEMORANDUM FOR THE SECRETARY OF THE INTERIOR.

In her letter of January 23, 1926, Mrs. Kahn requests information relative to the circumstances that led to the draining of Lower Klamath Lake in Oregon and California, and the prospects of reflooding it as urged in numerous letters she has received.

In 1917, the United States entered into a contract with the Klamath Drainage District, organized under the laws of the State of Oregon, for the purpose of reclaiming by drainage, evaporation and irrigation about 27,000 acres of land within or adjacent to Lower Klamath Lake. Under this contract, the District agrees to repay over a period of years to the United States the sum of \$104,898.15, representing past expenditures in connection with the Klamath irrigation project and the District lands upon works the benefit of which would be utilized by the District. The United States agrees to close the gates in the embankment previously constructed to cut off from the lake the waters of Klamath River, and to keep these gates closed during the continuance of the contract.

It is provided, however, that should the reclamation of the District lands prove impracticable or be not accomplished in reasonable compliance with the provisions of the contract, and should it be deemed necessary or desirable by the United States for the purpose of reclaiming or best utilizing the public lands within the marsh to flood or overflow same and to that end to open or regulate the gates, then any claim to damage from flooding

of District lands is waived.

Pursuant to this contract, the District made the initial payment required thereunder of \$23,500 and has kept up the annual installments since that time. It has also proceeded with the reclamation of its lands to an extent that any court would undoubtedly hold as constituting reasonable compliance with the contract terms, and has repeatedly advised us of its intention to continue with this reclamation.

In order to secure authoritative information on the present conditions and prospects for future development of this area, the questions involved were referred last summer to a committee of experts consisting of Macy H. Lapham, Associate Soil Technologist, U.S. Department of Agriculture, W.L. Powers, Soil Specialist, Oregon Experiment Station, and Charles F. Shaw, Soil Technologist, California Experiment Station, who made a careful study and report with reference to the lands involved which are in the vicinity of our Klamath project, Oregon-California.

This report states that the lands in the lake bed itself are of little agricultural value, but that the tule lands on the north and west sides of the lake will probably warrant the cost of reclamation. The lands of the Klamath Drainage District are being developed with reasonable assurance of success where they comprise peat soils but with probability of failure in the bed of the lake.

It was therefore proposed in the report that a portion of these lake bed lands be reflooded, in order to provide a bird refuge. This would require for the protection of the productive portion of the area the construction of some ten miles of levee, funds for which are not available, besides which it

appears that the right to drain the lake was originally granted the United States in order that the land could be used for Agricultural purposes. It is therefore claimed by interested parties that under this grant the United States has no right to flood the lake for some other purpose. These obstacles are in addition to the objections to such a step which would undoubtedly be interposed by the Klamath Drainage District under their Contract above referred to. The entire matter has been referred to the Bureau of Biological Survey of the Department of Agriculture, which may be able to furnish Mrs. Kahn with additional information.

(Sgd.) Elwood Mead

Commissioner.

Agriculture and Wild Fowl Conservation at Lower Klamath Lake

Can aquatic bird life be conserved and agriculture be developed at the same time within the area of lower Klamath Lake and marshes?—A short story of the agricultural and biological conditions

By Copley Amory, Expert in Reclamation Economics, Bureau of Reclamation

OUR topic concerns the Klamath Drainage District in Oregon and efforts to establish agriculture there on its drained marsh and lake bed lands on one hand; and the proposal to reestablish conditions favorable for wild-fowl conservation on the remaining part of the lower Klamath Lake area on the other.

The Federal reclamation project, known as the Klamath reclamation project, lies partly in California and partly in Oregon. (Map 1.) That portion of the Klamath reclamation project, known formerly as lower Klamath Lake division, lies in the western portion of the Klamath reclamation project, and is partly in Oregon and partly in California. (Map 2.) The Klamath drainage district is that portion of the former lower Klamath Lake division which lies in Oregon excepting that portion of marsh land which lies west of the railroad dike. (Map 2.)

On the line of division between Oregon and California was formerly lower Klamath Lake and its surrounding marsh lands, aggregating about 80,000 acres and of which about two-thirds was marsh, and one-third water. (Map 2.)

AGRICULTURE OF LOWER KLAMATH LAKE AREA

THE Southern Pacific Railroad built a dike or causeway across the upper end of these Klamath marshes in which gates were placed at the instance of the

Reclamation Service to regulate or exclude, under control of the Federal Government, the waters of the river from the lake and marsh.

After the year 1918 the exclusion of the river water from the lake and marsh area of the Klamath drainage district lowered the lake levels and began the drying up of the marshes. Continued exclusion of the river water and the constant evaporation from the lake surface continued until now only a remnant of the former lake remains. The former lake is now reduced in surface area from about 40 square miles and from a depth of approximately 13 feet to a mere sump of about 3 square miles and 5 feet in depth, of which the water now is practically free from alkali.

The land thus drained is of two kinds, a peat soil composed of accumulated remains of aquatic plants generally similar in kind to peats found elsewhere and the lake-bed land composed of a claylike soil. This soil is in part the remains of a primitive vegetable plant or diatom which, when soaked with water, has the consistency of jelly, and is incapable of supporting the weight of a man, and when dry the character of horn, forming a hard soil. It is termed diatomaceous colloidal, and into it very little alluvium has been carried with inflowing waters.

The climate is northern and liable to frost in June and September. There is

a good growth of timber in the adjacent mountains and grass for grazing on the surrounding plains. The region is served with ample railroad facilities connecting it with Portland on the north and San Francisco on the south. Klamath River affords a considerable hydroelectric development. The upper river's flow is largely controlled by the surplus water of Klamath Lake. Before the drainage of lower Klamath Lake the water level of these 80,000 odd acres acted as a regulating reservoir for Klamath River.

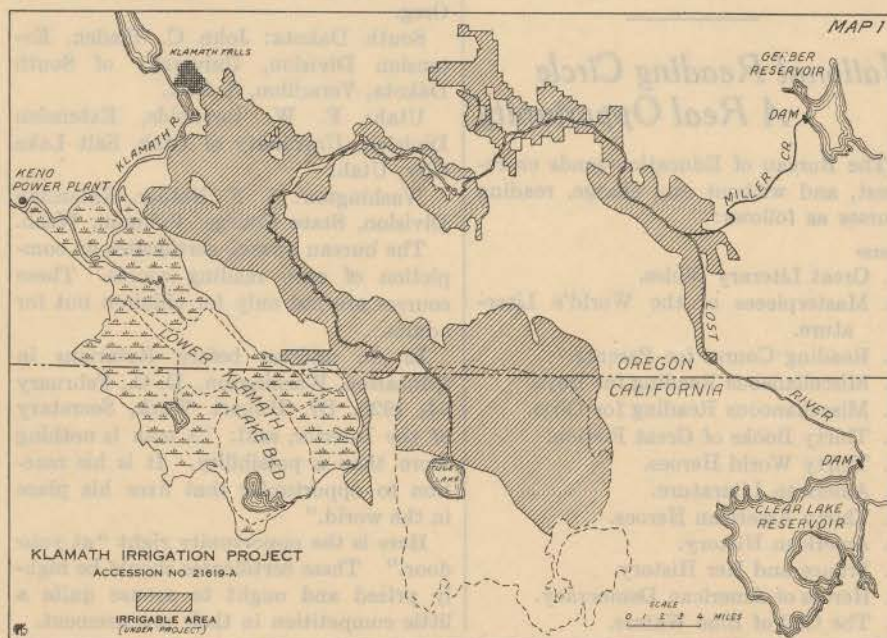
The beginning of agricultural development of this region dates from the early settlement of Oregon. Soon after passage of the Federal reclamation act in 1902, reclamation engineers found one of the most complex problems of all reclamation projects in this Klamath project as a whole, for—

"it contains an irrigation problem, an evaporation problem, a run-off problem, any one of which is difficult in itself but all of which taken together form a most perplexing whole. In nearly all of the reclamation projects water has to be conserved. In this project there is more than enough and the question of disposing of it becomes an important part."

To this array of difficulties in creating the Klamath reclamation project as a whole should be added the particular agricultural problems of lower Klamath Lake, the solution of which has been the purpose of the Klamath drainage district to solve. These agricultural problems presented themselves after the major engineering problems had been solved and their execution completed. They are the adaptation of crops to the particular and individual soils and climate of the Klamath drainage district.

The Klamath drainage district is an organization under State laws which provide a cooperative means of securing credit and establishing drainage and irrigation work for agriculture.

Under a contract between this Klamath drainage district and the United States the drainage district undertakes to pay the Government \$104,898.15 and to reclaim by drainage approximately 27,000 acres of land, and in its performance exercise due diligence. A supplementary contract between the same parties provides that the United States shall for an additional consideration furnish water for irrigation for the land which is to be drained and which will in turn have to



be irrigated. The seepage water resulting from this irrigation must find its way by gravity to the sump of the lake. (Map 2.)

The Klamath drainage district has faithfully performed its terms of the contract in respect both to its payments and to due diligence in prosecution of its agricultural experiment.

What knowledge and experience have been acquired and what utilization has already been made of the lands designated for drainage and irrigation, while complying with the contract, are still insufficient to foretell what degree of success will in the end be attained, or to what extent the former lands of the lower Klamath Lake area will be appropriated for agriculture.

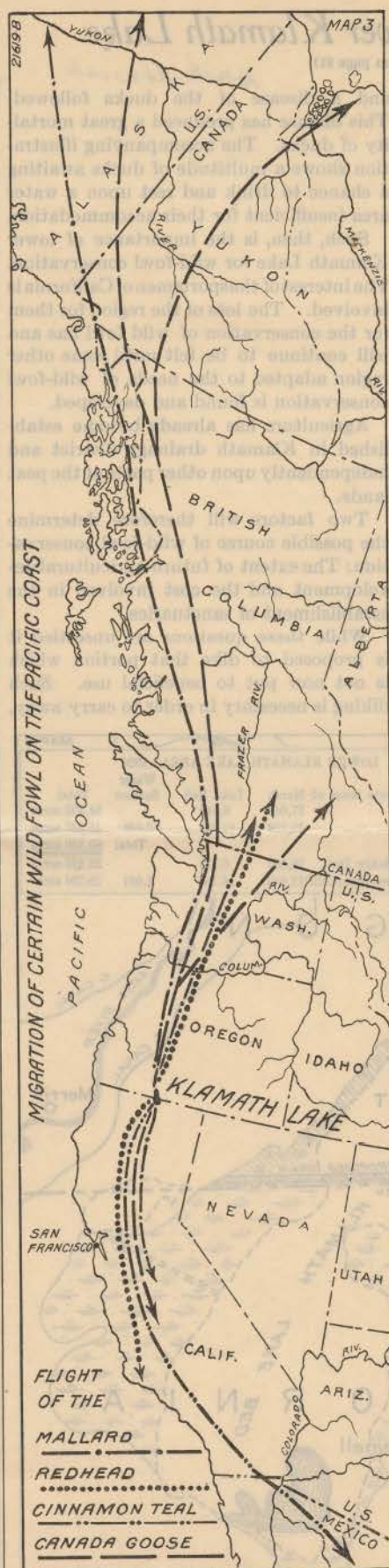
Seldom has the adaptation of crops to soil, consideration of late and early frosts, and drainage, irrigation, and the necessity for drainage of seepage water of fered such difficult problems in combination, as are presented in the lands of the Klamath drainage district. Its solution must therefore be drawn from the advice of agricultural experts and from experience involving time and the expenditure of capital.

That portion of the district composed of peat soils has proved its fitness for pasture meadows and has produced abundant crops of rye and in less degree of other grains, and there is reason to assume that when water level conditions are better understood and controlled, these peat soils will prove profitable for alfalfa. It can be said of these peat soils that the farmers upon them have created an agricultural land asset. It is probably true also that with additional time and experience these assets will increase in value.

Less has been accomplished in experimentation and proof of the value of the soil of the lake bed. It produces, with abundant moisture, abundant weeds. It has produced a vigorous growth of barley and oats which in 1925 was not matured and harvested but fed to pasture. It can be said of this colloidal soil that it is unusual in its chemical and physical character, and we can not cite an example of the successful cultivation of a soil of similar character. In the Sandwich Islands a somewhat similar, but not a similar, colloidal soil has been "planted to cane and with indifferent results."

Inasmuch, therefore, as the Klamath drainage district has performed its terms of the contract with the United States, it becomes the obligation of the United States to respect the terms of the contract. It is, furthermore, a necessary part of good faith to refrain from any act which will impair the credit of the Klamath drainage district.

A condition resulting from the drainage of the marshes is the drying out of a vast



area of peat with its consequent liability to fire. As the development of irrigation proceeds, water from the irrigation canals will diminish this fire risk.

From these facts then, we find that an effort is being made by an organization directed by responsible and experienced cultivators, to cause two blades or more of grass to grow where none grew before. The difficulties are such that time and money are necessary to determine how far the lands under experiment are or are not agricultural lands.

In consideration of the contractual obligations of the two parties of the contract, the Government and the Klamath drainage district, time should be allowed in which to come to a final and fair conclusion.

If the lake bed area is nonagricultural, when it shall have been so demonstrated, consideration of some other use of the lower Klamath Lake bed area will be in order.

WILD-FOWL CONSERVATION

In 1908 President Roosevelt issued an Executive order creating Klamath Lake reservation, in order to protect the multitude of varied bird life of lower Klamath Lake, "subject," however, "to the use of any part of the reserved area by the Reclamation Service."

Quoting from the Volt:

"The wild-fowl nurseries of Klamath County are an outstanding feature of the region. Except on the Gulf of Mexico nothing was comparable with the refuges and breeding grounds of the Klamath Lake region. Numerous ducks, including mallards, pintails, canvasbacks, gadwalls, mergansers, cinnamon teal, and ruddy ducks, were among the former inhabitants of lower Klamath Lake. The marshes were also the homes of Canada geese, sandhill cranes, bitterns, coots, and rails. Along the mud flats were avocets, stilts, phalaropes, snipe, killdeer, and other waders. On the lakes were colonies of numberless gulls, night herons, and great blue herons, cormorants, grebes, terns, and pelicans."

Mr. and Mrs. William L. Finley, of the National Audubon Society, than whom no one is better qualified to speak of the former conditions of bird life in this region, say:

"In the past the birds of Klamath County have been a factor in its development. Back in the nineties, when market hunting was in vogue, a hundred and twenty tons of ducks were shipped from this section during one winter season to the San Francisco markets. The plumage of untold thousands of grebes, terns, and other beautiful birds was sent to the

(Continued on page 82)

Conservation at Lower Klamath Lake

(Continued from page 81)

millinery markets of New York and Paris. The days of the market and plume hunters have passed into the period of the sportsman and tourist. Each year more wild land is brought under cultivation; swamps, ponds, and lakes are drained, forests are cut, and fields fenced. These activities are of great importance to the State. As Klamath County develops, if some attention is paid to nesting, feeding, and resting refuges for our wild birds, their variety and number can be retained even under the change of conditions. Klamath County is one of the great outdoor lands of the West. Conserving its remarkable bird life will prove a valuable future asset for a desirable class of tourists who have money to spend and money to invest."

Now, owing to the drainage of the waters this bird life has almost disappeared.

In recent years the small area of water already described as the remaining portion of lower Klamath Lake or the sump has been the temporary resting spot for a multitude of ducks. So numerous were they in proportion to the diminished lake area that a pollution of the water has resulted

and a disease of the ducks followed. This disease has produced a great mortality of ducks. The accompanying illustration shows a multitude of ducks awaiting a chance to drink and rest upon a water area insufficient for their accommodation.

Such, then, is the importance of lower Klamath Lake for wild-fowl conservation. The interest of the sportsmen of California is involved. The loss of the region for them for the conservation of wild fowl has and will continue to be felt until some other region adapted to the needs of wild-fowl conservation is found and developed.

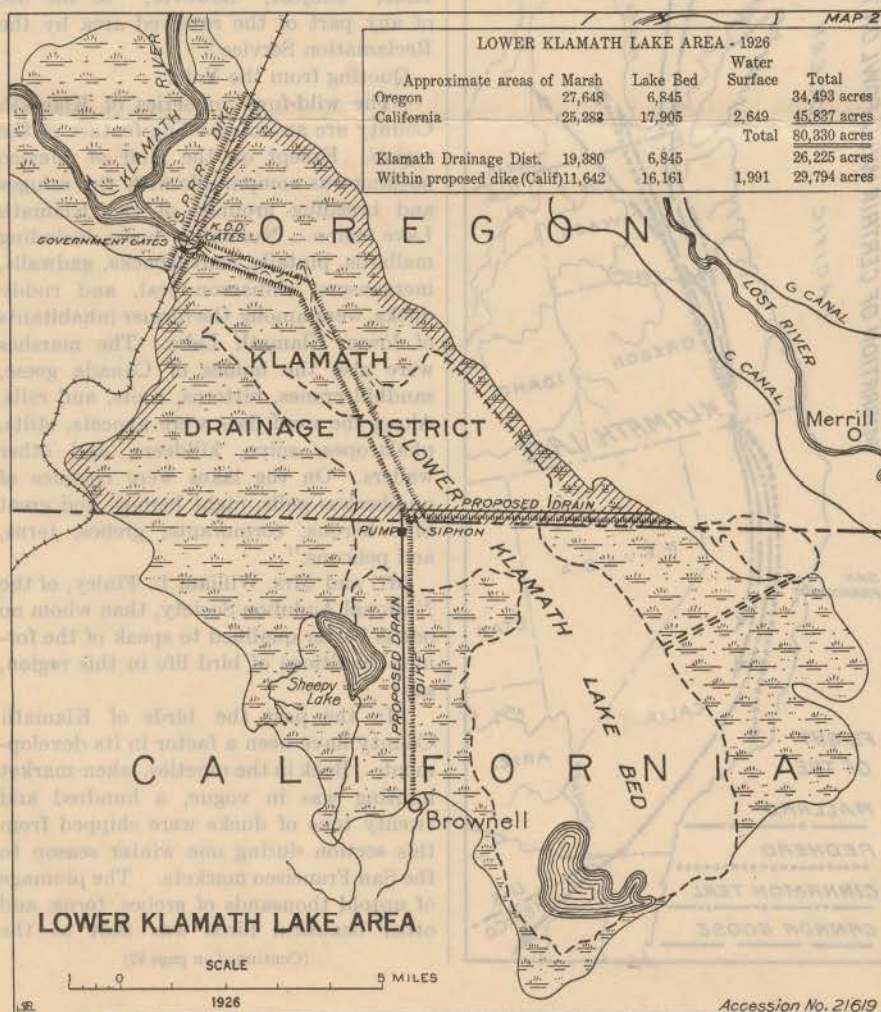
Agriculture has already become established in Klamath drainage district and independently upon other parts of the peat lands.

Two factors will therefore determine the possible course of wild-fowl conservation: The extent of future agricultural development and the cost involved in the establishment of sanctuaries.

While these questions are unsettled it is proposed to dike that portion which is not now put to beneficial use. Such diking is necessary in order to carry away,



Concentration of ducks caused by drainage of their feeding grounds



impound, and dispose by evaporation of the seepage water flowing from the Klamath drainage district and to prevent the restored water in the lake from drowning out agriculture in the Klamath drainage district. This seepage water must be pumped over the dike and would become an annual recurring charge against wild fowl conservation.

These two charges taken together probably exceed the expectation of casual estimates of cost, but the conservation benefit which would result would probably, on the other hand, prove very material.

Besides the element of cost the consideration of an accumulating increase of alkali within the dike region should be taken into account.

Pending determination of the course to be followed at lower Klamath Lake and irrespective of its conclusion, prudence would seem to dictate an effort to find and develop other areas for sanctuaries within the United States and within the line of flight (map 3) where the cost as compared with the benefit would promise equal or better results than now appear probable at lower Klamath Lake.

If an alternative area or areas prove available and besides them a portion of the lower Klamath Lake is developed, conservation would not then provide the rising generation in California with a supply of wild fowl equal to that of preceding generations.

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UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF BIOLOGICAL SURVEY

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REPORT
ON
PROPOSED REFLOODING
OF
A PORTION OF LOWER KLAMATH LAKE
CALIFORNIA

By
L. T. Jessup, Associate Drainage Engineer.

Prepared Under the Direction of
Paul C. Redington, Chief.

October
1927

REPORT
ON
PROPOSED REFLOODING
OF
A PORTION OF LOWER KLAMATH LAKE

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REPORT
ON
PROPOSED REFLOODING
OF
A PORTION OF LOWER KLAMATH LAKE

INTRODUCTION

Lower Klamath Lake, situated in northern California and southern Oregon, comprised a total of 80,000 acres of lake and surrounding marsh lands. In its original condition it was a great breeding place for wild fowl and in 1908 it was set aside as a bird reservation by executive order, subject, however, to the requirements of the U. S. Reclamation Service which had already started a project in this vicinity and had acquired rights to lands and water. The gradual development of agriculture finally resulted in the drainage of the lake and at present, except for a few small areas, it presents the appearance of a desert plain.

It has been the hope and belief of bird lovers and sportsmen that this lake could be restored to its former state, or at least in part, without seriously damaging agricultural interests or interfering with other rights and at a cost commensurate with its value as an area for the conservation of wild life.

In 1925 the Bureau of Reclamation appointed a commission to report on the soils and conditions of Lower Klamath Lake. Their report concluded that the marsh or peat lands had agricultural value or at least a potential value as such, but that the lake bed proper did not. They recommended the establishment of a sump comprising the lake bed in California the water surface of which was not to be raised above elevation 4078 under ordinary conditions.

With this report as a basis the Bureau of Biological Survey made an investigation of the possibility of creating such a sump and of the requirements necessary; the results of which are set forth in the following pages.

SUMMARY

Using the U. S. Reclamation Service map as a basis only about 9,000 acres would be covered if the water surface must not exceed elevation 4078.

A gravity outlet for the proposed sump is not available to Tule Lake, the Klamath River or elsewhere. When the concentration of alkali became too great the water would have to be pumped out through the Straits to Klamath River.

not true
Due to agricultural and power development water from the Klamath River is not available except during years of high run-off. Even during these years a continuous flow would not be available and water could be taken only during the one or two months of spring run-off.

If the Klamath Drainage District and lands on the west side in California were all fully developed the return flow would be sufficient to maintain a sump having an area of about 9,000 acres. All of this water would have to be pumped into the sump.

Until these lands develop water rights on creeks entering the west side would need to be purchased. With this scheme water would not have to be pumped from the west side. Pumping from the Klamath Drainage District and for flushing out the sump would still be required.

2 The cost of works required under the first scheme would be \$315,000. The annual cost of operation and maintenance might be as high as \$20,000.

The cost of works under the second scheme would not be less than \$440,000. The cost of operation and maintenance might be as high as \$17,500.

2 If the dikes should break under certain assumed conditions as to land development and height of sump a good many thousand acres of crop might be flooded with resulting claims for damages.

If the lands on the west side and in the Klamath Drainage District ever do develop fully it is quite possible that these areas will need to provide a sump along lines similar to those discussed in this report in order to provide for their return flow. The main point of difference being that they would not provide means for flushing it out.

LOCATION

Lower Klamath Lake is situated in Siskiyou County, California and Klamath County, Oregon. With reference to its location on the Klamath River it is below Upper Klamath Lake which is used to store water for agriculture and power and also it is below the main diversion canal for the Klamath Project. It is above the main power plant of the California Oregon Power Company which is at Copco, California.

DESCRIPTION (Original Condition)

Area

(Not including that portion west of the Southern Pacific R. R. fill.)

| | |
|--------------------------------|--------------|
| True marsh lands | 40,000 acres |
| Old lake and islands | 32,400 |
| Miller Lake | 3,100 |
| White Lake | 1,100 |
| Total | 76,600 |
| In Oregon | 27,600 |
| In California | 49,000 |
| Total area of lake basin | 120 sq.mi. |
| Watershed not including lake | 403 |
| Total watershed including lake | 533 |

Soil (Abstracts from report by Lapham, Powers and Shaw)

Marsh or tule Lands

"The marsh or tule lands consist of a surface layer of more or less decomposed peat -- resting on a colloidal clay similar to that exposed in the lake bed. The shrinkage of this soil (when dry) renders the surface somewhat uneven and makes surface irrigation difficult. Sub-irrigation by raising the water table will tend to concentrate any alkali in the surface and may materially damage the soils. Adequate irrigation and deep drainage facilities must be provided to prevent alkali accumulation.

Lake Bed.

"This 'soil' is decidedly unusual in character. It is a diatomaceous earth formed as a gelatinous sludge in the waters of the lake ---- . It has enormous waterholding capacity. This soil shows no evidence of black alkali but bicarbonates and chlorides are present.

Elevation.

Marsh Lands.

The elevation of these lands varied from 4082 to 4084.

Lake Bed

The elevation of the lake bed varied from 4070 to 4082.

Water Supply.

The lake had no natural outlet except by evaporation. The main water supply was from the Klamath River which flowed in through a channel called the Straits during periods of rising stage of the river and also during periods of a high rate of evaporation on the lake. Water from the lake flowed back into the river during periods of falling stage of the latter. The lake also received inflow from small streams and springs from the west and southwest; the principal streams being Willow, Cottonwood and Sheepy creeks.

Variation in Water Surface of the Lake.

| Year | Minimum | Maximum | Difference |
|------|---------|---------|------------|
| 1907 | 4084.7 | 4087.2 | 2.5 |
| 1908 | 84.1 | 85.8 | 1.7 |
| 1909 | 85.9 | 87.0 | 1.1 |
| 1914 | 85.3 | 87.3 | 2.0 |
| 1915 | 84.9 | 86.6 | 1.7 |
| 1916 | 85.1 | 86.4 | 1.3 |
| 1917 | 84.8 | 86.5 | 1.7 |

These elevations also approximately represent that of the water surface of the Klamath River at the mouth of the Straits.

Precipitation

| | |
|---------------|--------------|
| Klamath Falls | 12.83 inches |
| Tule Lake | 8.84 |

Evaporation

About 4 feet per year on open water

Adams Tule Cut

This is ditch constructed in early days to carry water from the lake in a northeasterly direction through a divide to irrigate lands in the lower end of Klamath Valley in the vicinity of Merrill, Oregon. It probably never carried more than 50 second feet.

HISTORY

California was admitted to the Union in 1850, Oregon in 1859.

The states of California and Oregon acquired Lower Klamath Lake by the Swamp Act of 1860.

The Klamath Indian Reservation was established in 1864.

The California Oregon Power Company appropriated water and a power site on the Klamath River just below the Oregon line in 1902.

The U. S. Bureau of Reclamation made the first reconnaissance of the Klamath Project in 1903.

In 1904 and 1905 California and Oregon ceded the lake back to the United States for use by the Reclamation Service. Oregon gave the Reclamation Service the right to the water of the Klamath River.

Prior to this withdrawal about 20,000 acres of the Oregon portion of the basin and a small part of the California marshes had been patented under the Homestead Law and the state swamp land acts.

In 1908 Lower Klamath Lake was made a Bird Reserve by executive order. This was subject to the requirements of the Reclamation Service.

In 1906 the Southern Pacific R.R. Co. began preparation for the building of a fill across the northern portion of the basin. This fill and the gates on the Straits were to be constructed according to certain specifications supplied by the Reclamation Service. This work was completed in 1912.

In 1914 practically all of the marsh lands withdrawn from entry for the purpose of the Reclamation Service, with the exception of the Bird Reserve, were restored to the public domain.

The Klamath Drainage District comprising 27,600 acres was organized in 1915. This included all of the basin in Oregon east of the railroad fill.

During 1914-1916 the gates at the Straits were closed about three times but were opened again due to protests from landowners receiving water from Adams Tule Cut.

In February, 1917 the U. S. Reclamation Service entered into a contract with the California Oregon Power Co. relative to storage in Upper Klamath Lake.

In November, 1917 the U. S. Reclamation Service entered into a contract with the Klamath Drainage District providing among other things for the closing of the gates at the Straits, for the delivery of 50 second feet of water to lands under Adams Tule Cut and the district to pay the Reclamation Service \$104,000. Payment to be completed by 1936. This sum was arrived at in the following manner: The Reclamation Service had expended \$283,000 in acquiring rights and making investigations, surveys, etc. relative to reclaiming Lower Klamath Lake. It appeared that 54,000 acres were susceptible of reclamation. There were 20,000 acres of patented land in the drainage district therefore the district was to pay 20/54 of the above sum. The Reclamation Service retains control of the gates until all of the 283,000 shall have been received. They also retained the right to reopen the gates should the reclamation of the district lands prove to be impracticable.

The gates were closed October 12, 1917 and no water from the Klamath River has entered the basin except for water used for irrigation of the drainage district.

The California Oregon Power Co. completed the first unit of the Copco plant in 1918.

In 1919 fifty settlers squatted on portion of the marsh in the Bird Reserve claiming that this marsh land belonged to the state of California and was subject to homestead entry. This contention being that the act of 1904 conveyed only the open water of the lake. To date (1923) offers have been refused by the Land Office.

The California Oregon Power Co. completed dam and began storage of water on Upper Klamath Lake in 1919.

In May 1920 Congress passed the Baker Act providing for the opening of public lands in California to homestead entry under certain conditions as to the assumption of a proportionate part of a certain sum (\$283,000) apportioned by the Secretary of the Interior by privately owned lands of a similar nature. The land in question is situated in Lower Klamath Lake. Failure of certain private owners to comply with provisions of this act has rendered it inoperative as to disposition of these lands (1923).

In August 1921 the Klamath Drainage District purchased by contract from the Reclamation Service a water right sufficient to irrigate the district for the sum of \$50,000, to be paid in ten annual installments after beginning the use of water. Water can be used only for irrigation purposes. The Reclamation Service agreed to install permanent gates.

In 1922 Klamath Drainage District engineers estimated cost of reclamation of the first unit, 13,500 acres, at \$155,200 or \$11.50 per acre. Estimated cost of entire district, 27,000 acres, was \$395,000 or \$14.60 per acre. This latter included the cost of pumps to return the seepage water and return flow back into the Klamath River. The cost of operation and maintenance was estimated at \$2.80 per acre.

By November 1922 the lake had subsided to a small sump of 365 acres in the extreme southern portion. The elevation of the water surface on November 17, 1922, was 4076.7

In 1922-23 the drainage district constructed several miles of ditches. During this period there were several bad fires in the district.

About 1922 or 1923 the California Oregon Power Co. raised the dam at Copco and completed second unit of plant.

About 3000 acres were planted in the drainage district in 1922. There are probably about 3500 acres in crop this year (1927). Probably not much over 4000 acres have ever been in crop. Some crops have been good and others poor.

Drainage district officials now claim that the first unit of 13,500 acres is completed. The cost is said to have been about or a little over \$200,000 including the Reclamation Service contracts.

In September 1927 the Bureau of Reclamation installed permanent gates at the Straits at a cost of several thousand dollars.

In September 1927 organization of the Klamath Lake Grazing Association was perfected and a contract entered into with the Bureau of Reclamation for a period of 16 months. This provides for the regulation of grazing on Lower Klamath Lake.

DESCRIPTION (Present Condition)

Water Area.

At present there is no water in the southern portion of the lake. This spring (1927) the greater part of the lake proper above the "Neck" (Neck refers to the narrow portion of the lake bed proper below the state line.) representing several thousand acres and including a considerable portion of the Klamath Drainage District was covered with water. The area covered in September, 1927 consisted of several hundred acres just south of the state line, a few hundred acres in Sheepy Lake, about 1200 or 1500 acres in Miller Lake and a few other small lakes.

Sheepy Lake

Sheepy Lake is fed by springs and water from Sheepy and Cottonwood creeks. It overflows to the north and west into the main lake.

Miller Lake.

Miller Lake covers an area of about 3100 acres when full and is not connected with the main lake. However it probably overflows into the main lake during years of very heavy run-off. It appears to contain considerable alkali and tules do not grow on its shores. A fill was constructed across one end of this lake for a highway and wave action very seriously damaged it last winter. It is now proposed to drain this lake into the main lake in order to protect the highway. The proposed ditch is to be just south of the state line.

Use of Water.

Most of the water in the streams and spring is used for irrigating small valleys adjacent to the basin and marsh lands in California. Except in the spring during years of high run-off not much of this water gets to the main lake.

Elevation.

Due to drying and also fires the elevation of the marsh lands or peat soils has been lowered. Probably the average lowering has amounted to at least one foot.

Ownership and Use.

The Klamath Drainage District includes all of Lower Klamath Lake north of the state line and east of the S. P. Railway fill and comprises 27,500 acres. About 20,000 acres of this is patented. About 3500 or 4000 acres are cultivated and the remainder is used for grazing.

On the east side of the lake in California title is claimed to about 6000 acres of the marsh land. Data is not available regarding all of the ownership of the marsh lands on the west side of the lake in California but probably not less than 4000 acres are claimed.

A few hundred acres of the lake bed proper in California is being planted to grain by squatters. The remainder is used for grazing.

The Klamath Lake Grazing Association has leased all of the unpatented land in the lake basin in California. The Association expects to install some fences and other improvements and will attempt to prevent the weeds and foxtail which grow in this area from being overgrazed by itinerant bands of sheep. They will also patrol the dry peat lands to prevent fires.

PROPOSED IMPROVEMENT TO THE BIRD RESERVE.

As mentioned before the Bureau of Reclamation appointed a commission to report on conditions in Lower Klamath Lake in 1925. This commission consisted of Macy H. Lapham, Associate Soil Technologist, U. S. Department of Agriculture, W. L. Powers, Soil Specialist, Oregon Experiment Station, and Chas. F. Shaw, Soil Technologist, California Experiment Station. Some extracts from their report are given below:

"Provision for deep drainage of the peat lands is essential to any plan of development. Drains should be maintained at a minimum effective depth of six feet, with a capacity equal to from one-third to one-half of the irrigation requirements. Such a system of deep drains would necessitate pumping as gravity outlets are not available. Drainage water could be pumped through the railway embankment into the Straits, or into a diked sump in the lake bed. The latter is considered to be the more feasible and satisfactory method for the Oregon Drainage District, and the only practicable method for the lands in California.

"The lands of the Oregon drainage district are as yet inadequately provided with drainage, and in the Sheepy Lake and Oklahoma districts drainage is wholly inadequate. Suitable drainage can not be provided for the latter districts without a diked sump into which the drainage waters could be pumped.

"It is recommended that a drainage sump be established by constructing a levee from a point on the foothill in the vicinity of Brownell northerly to the State line or beyond, thence easterly to the uplands, a probable total distance of about ten miles.

"The establishment of this sump, comprising nearly all of the lake bed in California would not only provide a means of disposing of drainage waters from the reclaimed peat lands, and to a degree protect the peat lands from fire, but it would re-establish a considerable body of water for bird life.

With this report as a basis the Bureau of Biological Survey started an investigation along the following lines:

1. Determination of the area that would be covered with water at elevation 4078 which was about the elevation recommended by the commission for ordinary conditions.
2. Cost of improving Adams Tule Out to permit flushing the lake down to an elevation of about 4073.
3. Cost of works for bringing water from Klamath River.
4. Location and cost of dike to restrict water area and to protect the drainage district on the north and settlers on the west.
5. Cost of pumping water into the sump in order to protect the above mentioned lands.
6. Several other points in connection with the above.

DISCUSSION OF PROPOSED PLAN.

Area.

The Reclamation Service made a survey of the bed of Lower Klamath Lake in 1905 the results of which are shown on a publish map, (Sheet 1, Map No. 7833, July, 1906, "Topographic and Irrigation Map, Upper and Lower Klamath Projects".) This survey was made under adverse condition but it is regarded as sufficiently accurate for the purpose of this report.

In 1923 Mr. Allen L. Darr, Bureau of Reclamation, prepared a report on the "Reclamation of Lower Klamath Lake" and the following table of areas and capacities are taken from this report.

| Elevation above sea level | Area Acres | Total Capacity Acre Feet. | |
|------------------------------|------------|------------------------------|--------------------------|
| 4073 | 0 | 0 | |
| 4074 | 1000 | 500 | |
| 4075 | 1400 | 1700 | |
| 4076 | 2600 | 3700 | |
| 4077 | 6000 | 8000 | |
| 4078 | 9000 | 15500 | Limiting eleva- tion. |
| 4079 | 14000 | 27000 | |
| 4080 | 20000 | 49000 | |

The total area of the lake bed below the Neck, (that narrow portion just south of the state line and which would probably be the best location for a proposed dike), is 16,000 acres.

The above table shows that if the water surface must be restricted to elevation 4078 only 9,000 acres would be covered. Such a sump would leave gently sloping flats particularly on the east side which would tend to become highly impregnated with alkali.

Outlet

Lower Klamath Lake had no outlet except through the Straits which also served as an inlet. The direction of flow depended on which was the higher, the lake or the river. Although more water flowed into the lake than out, the outflow that did take place tended to prevent the concentration of alkali in the waters of the lake. Since the elevation of the lake under original conditions, and of the river at the mouth of the Straits varied from 4084 to 4087 it is obvious that a sump having a surface elevation of 4078 could not find a gravity outlet to the river.

In 1908 the Reclamation Service examined the possibility of reclaiming a portion of Lower Klamath Lake down to elevation 4078 by drawing off the water through Adams Tule Cut, which channel has been described elsewhere. The estimate of cost for enlarging the deepening Adams Tule Cut was \$350,000. The plan called for a ditch of somewhat greater capacity than would be needed for the proposed sump but it was not nearly so deep as would be required since to serve the purpose of flushing out the accumulated alkali it would be necessary to draw the water down to about elevation 4073.

However, the cost need not be considered for other reasons. The Bureau of Reclamation has reclaimed the northern portion of Tule Lake and a considerable part of the necessary works are already constructed. The southern portion of Tule Lake, or about 35,000 acres, is to be used as a sump for the drainage water from the irrigated lands to the north and also to take occasional floods from Lost River. This sump was made as small as possible and the ultimate plan calls for a dike along its northern shore to protect the irrigated land.

It is obvious that the Bureau of Reclamation and the Klamath Irrigation District would oppose the use of this sump as an outlet for lower Klamath Lake. Nor could the water from Lower Klamath Lake be used to supplement the irrigation supply for lands above Tule Lake. In the first place the flow would be intermittent and irregular which would be objectionable, and in the second place; it has been necessary to construct drains on this irrigated land to protect it against alkali and certainly the use of alkali water from Lower Klamath Lake would be very objectionable.

Alkali probably would not accumulate in lower Klamath Lake with great rapidity but eventually it would have to be flushed occasionally particularly after the return flow from the peat lands began to enter it. The only means of doing this is by pumping to the Klamath River, using the Straits as an outlet channel.

Water Requirement.

Data on evaporation in the vicinity of Klamath Falls indicate the loss from open water to be about four feet per year. In 1912 an experiment near Lower Klamath Lake showed the loss by evaporation and transpiration from a 5-foot pan containing growing tules to be 4.38 feet for the period May to September inclusive, while for the same period the loss from an ordinary evaporating pan was 3.01 feet. It is likely that during the winter months the difference in loss would have been to some extent in the other direction.

The average precipitation at Klamath Falls is 12.83 inches and it probably is some less on Lower Klamath Lake.

The proposed sump would also lose some water by evaporation and transpiration from the soil on a considerable area of marginal land. The loss in excess of precipitation may be taken at about 3.5 feet. To maintain the sump at a constant elevation of 4078 or with an area of 9,000 acres would require over 30,000 acre feet annually.

Water Supply

Klamath River.

The question of water supply and rights is extremely complicated. The U. S. Bureau of Reclamation has acquired from the State of Oregon the right to use the entire flow of the Klamath River for irrigation or purposes incident thereto. This reclamation project is not yet fully developed but at the present time diverts approximately 150,000 acre feet annually from the Klamath River.

The California Oregon Power Company has some rights on the Klamath River in Oregon, other than those granted by the contract with the Bureau of Reclamation, but these are small and in any event need not be considered in the discussion of this problem. This Company has a plant on the Klamath River at Copco which is located in California just below the California Oregon State line. The crest of the dam is 125 feet above the original low water of the river. The plant has two units of about equal size and the turbines are rated at 37,200 H.P. (Total). There are two 1250 kv.a. generators the total capacity of both is 20,000 kilowatts at 80 per cent power factor. Full operation of both units ordinarily requires about 2640 second feet but with possible overloading and with allowance for rapid fluctuation in discharge of the river about 3,000 second feet are required to operate the plant at its full capacity.

The power is used for commercial purposes in towns of southern Oregon and northern California. Considerable power is also used for pumping for irrigation and some for mining. The surplus power is transmitted south to the system of the Pacific Gas and Electric Company, which system is interconnected with that of the California Oregon Power Company. While this Company has rights to only a small part of the Klamath River from the State of Oregon it has a right from the State of California to over 3,000 second feet.

By contract dated February, 1917 between the United States and the California-Oregon Power Co. the latter undertakes to regulate the Upper Klamath Lake under the Supervision of the United States for a period of 50 years. The power company agreed to construct a dam at the outlet of the lake, said dam to be the property of the United States; to make satisfactory adjustments with all interests on upper Klamath Lake. (The dam was completed in 1919) The contract does not curtail the right of the United States to the waters of the Upper Klamath Lake and subject to these stipulations the power Co. may regulate the lake between elevations 4137 and 4143.3

In view of this contract it does not seem likely that the Bureau of Reclamation would permit diversions from the river if such were detrimental to the Power Co. More particularly so since the Company has not realized as much power as it expected from the construction of the dam due to a series or cycle of dry years which could not be anticipated from the years of previous record.

So far the Company has not been able to raise Upper Klamath Lake to the highest elevation permissible under the contract because of the damage that would result to lands bordering the lake. This they will overcome soon by the acquisition of rights and by the construction of dikes. When this is done the storage capacity of the lake will be something over 400,000 acre-feet.

For a nine-year period ending September 30, 1926 the average annual discharge of the Klamath River at Spencer Bridge below Keno and above Copco is 1,138,000 acre-feet. For this period the average annual diversion for the Klamath Reclamation Project was 116,000 acre-feet, making a total of 1,254,000 acre-feet. But the Reclamation diversions were increasing during this period until at present they amount to about 150,000 acre-feet. Subtracting this figure from 1,254,000 would leave 1,104,000 acre-feet average annual flow at Spencer Bridge available to the Power Co. As stated above 400,000 acre-feet of this can be controlled by storage in Upper Klamath Lake.

While the Copco plant requires about 3,000 second feet to operate at full capacity it will be assumed that 2,640 second feet is sufficient under ordinary conditions. This amounts to 1,911,000 acre-feet in a year and for one unit or half of the plant it would amount to 955,000 acre-feet.

| | |
|---|------------------|
| Ave. annual discharge of Klamath River | |
| For 9-year period. Flow at Spencer Bridge | |
| plus Reclamation diversion at Klamath Falls - - - | 1,254,000 ac.Ft. |
| Present rate of Reclamation diversion | 150,000 |
| Leaving | 1,104,000 |
| Amount required to operate one unit of | |
| power plant on basis of 2640 sec.ft. for | |
| both units | 955,000 |
| Leaving | 149,000 Ac.Ft. |

This amount would be sufficient to operate the second unit of the power plant 57 days during the average year. This figure would of course be less if 3,000 second feet were used as a basis. During the nine-year period under discussion there have been three years when the total discharge at Spencer Bridge was less than 900,000 acre feet.

Discussion of total run-off does not necessarily mean that no water is going to waste since the storage capacity may not give complete control.

Table Showing Discharge of Klamath River at Spencer Bridge Below Keno and Above Copco and Diversions by Reclamation Project.

| Year Ending Sept. 30 | Maximum Discharge One Day Sec. Ft. | Maximum Discharge Mean for One Month Sec. Ft. | Total Annual Discharge Acre Feet. | Diversions by Klamath Project Acre Feet. |
|----------------------------|---|---|---|--|
| 1927 | less than 3,000 | less than 3,000 | | |
| 1926 | 2,960 | 1,670 | 840,000) | 150,000) |
| 1925 | 2,220 | 2,000 | 1,120,000) (2) | 150,000) (3) |
| 1924 | 2,550 | 1,950 | 868,000 | 148,000 |
| 1923 | 3,890 | 3,640 | 1,150,000 | 120,000 |
| 1922 | 4,300 ° | 3,600 ° | 1,410,000 | 109,000 |
| 1921 | 4,700 ° | 4,100 ° | 1,660,000 | 93,100 |
| 1920 | 1,840 | 1,750 | 884,000 | 102,000 |
| 1919 | 3,430 | 3,220 | 1,170,000 | 98,700 |
| 1918 | 3,070 | 2,620 | 1,140,000 | 78,700 |
| Mean for 9 -year period | | | 1,138,000 | 116,000 |
| | | | | <u>1,138,000</u> |
| | | | Total | 1,250,000 |

° Estimated

(2) Advance information from U.S.G.S. subject to correction.

(3) Approximate.

During 1926 there were only 21 days when water went over the spillway at the power plant and then usually in small amounts, no doubt caused by fluctuation in the discharge of the river which can not be controlled with great accuracy at the storage dam due to wind action on the lake. During the year over 99 per cent of all the water passed through the turbines. This and the above table seems to indicate that practically all of the water was used in 1924, 1925, 1926 and 1927.

The second unit of the power plant was not completed until about 1923. The storage dam was not put into operation until some time in 1919. Also it must be remembered that the storage capacity of Upper Klamath Lake could not be fully utilized during the years of record given above and that the reclamation diversions have been increasing. One or more of these factors might have tended to reduce some of the larger maximum discharges given above.

*Lower River
water given
to Power Co.*

The Klamath Reclamation Project is not yet fully developed. In 1927 this project irrigated about 70,000 acres and has works already constructed for the irrigation of 126,500 acres, (this includes the Klamath Drainage District), and expects to ultimately irrigate 181,600 acres, (this includes 54,000 acres in Lower Klamath Lake, 27,500 acres of which are in the Klamath Drainage District). Not all of the water for this increase in area will come from the river but certainly the Klamath Drainage District which has already purchased a water right will take water from this source and should it ever become fully developed will divert not less than 50,000 acre feet and probably nearer 70,000 acre-feet.

2 { Still further the Klamath Indian Reservation, which comprises about 1600 square miles in the Klamath River watershed, claims a prior right over the State or Reclamation Service to all waters originating on the Reservation. On the Reservation there are irrigated at present about 17,000 acres and more or less preliminary plans call for the ultimate reclamation of 148,000 acres. This includes 80,000 acres in Klamath Marsh. Disregarding this latter area leaves a proposed increase of irrigated area of about 50,000 acres. While it is not likely that all of this development will take place in the near future, yet when it does not less than 100,000 acre-feet and very probably more will be required.

There are a great many other complications relative to the discharge of the Klamath River and relative to rights and claims but these need not be added to this discussion.

It appears that during the past ten years water would not have been available for Lower Klamath Lake for more than three years under present conditions of development and that when considering future development which already has rights it is very doubtful whether any water would have been available during this period.

It is true of course that the years considered in the above discussion have been, on the average, years of low run-off and that a very much higher average run-off occurred during the period 1904-1917. However when considering this period in connection with present development there would have been at least two years when water would not have been available and two or so more for which the availability is doubtful. It is of course possible that the cycle of high run-off will return during which some water would be available for Lower Klamath Lake during most of the years. It is also possible and indeed very probable that a dry cycle similar to the last 9 or 10 years will also return during which little or no water would be available.

It should be pointed out here that when considering the present use of water in connection with all the years of record (1904 to date) a steady or continuous inflow into Lower Klamath Lake could not have been maintained during any year. The lake, or that portion of it used

would have to be filled, (if any water were available at all), during one or two months of the spring run-off. During the remainder of the year evaporation would decrease the size of the lake to a comparatively very small area. (This statement holds true if there is no more water available from other sources than exists under present conditions. The possible development of other sources will be discussed later.)

During the 9-year period ending September 30, 1913 the discharge of the Klamath River at Keno, (which is below the Straits), averaged 151,000 acre-feet less than the flow at Link River, (which is above the Straits). While possibly some of these records are not highly accurate yet the above figure to some extent indicates the loss due to evaporation in Lower Klamath Lake. This of course does not represent total evaporation since during the period considered the run-off from the small streams entering Lower Klamath Lake was undoubtedly high. During the past 10 years, had Lower Klamath Lake been in existence, the actual average loss to the Klamath River at Keno probably would have been greater than the above figure since the small streams entering the lake have also been passing through a period of low run-off. This is presented to show that Lower Klamath Lake is probably not very desirable to the Power Co. for storage purposes since the loss by evaporation would likely exceed any benefit. Also it is not necessary to their present development, unless the water could be held over long enough to meet dry years, since the storage capacity on Upper Klamath Lake affords more or less complete control of the river during years of low and average run-off.

*do not want
making a dam
2 feet*

The above paragraph has reference to flooding the entire lake. The possibility of interesting the Power Co. in the construction of a sump in California on the basis of permitting them to use part of the water stored in it is very unlikely since it is highly impracticable as a study of elevations, run-off, evaporation, etc. readily show. Indeed, if the Power Co. took all of the water from the proposed sump (with its water surface limited to 4078) it would be sufficient to run their Copco plant at full capacity not more than three days, and all of the water would have to be pumped out. Even without the limiting restriction of 4078 it would be difficult if not impracticable to hold the water in the sump by dikes at an elevation sufficient to permit any of it to be drawn off by gravity, since it would be necessary to hold the water at an elevation of 8 or 9 feet higher than 4078.

Return Flow from Klamath Drainage District.

If all of Klamath Drainage District were irrigated the return flow would probably be about 27,000 acre feet. This water would contain very much more alkali than does the river water. It probably will be a good many years before the District is fully developed particularly if it has to raise the funds for the completion of the second unit which consists of the lake bed in Oregon. However, if

If rights to the water of the springs and creeks were acquired, which means the purchase of the land, and all of the water conducted to the lake it would be sufficient to maintain a lake area of several thousand acres even during a series of dry years. This would require a different arrangement of the proposed sump. The dike running north from Brownell to the State line would not be required but a dike would be required along all of that portion of the State line in Lower Klamath Lake. The total length of the dike required in each case would be about the same but with this scheme no water would have to be pumped from the west side.

With combinations of the above uncertainties it is possible to arrive at widely varying conclusions relative to water supply:

1. Under present conditions the water supply is sufficient to maintain a sump of several hundred acres. This may be increased some if Miller lake is completely drained.
2. If the Klamath Drainage District and the lands on the west side in California were fully developed the return flow would be sufficient to maintain a sump of about 9,000 acres.
3. If rights to all of the water on the west side were acquired by purchase it probably would be sufficient to maintain a lake area of several thousand acres even during dry years, and more in wet years.
4. If these rights were acquired and if the Klamath Drainage District were fully developed a series of wet years might raise the water to such an extent as to make necessary the purchase of some lands on the east side in California. It certainly would be likely to cause the water to rise above elevation 4078 and the dikes would need to be made sufficiently high to care for it.

COST

Dikes and Ditches.

Recently the Klamath Office of the Bureau of Reclamation prepared an estimate of cost for the dike proposed for this sump. It was not based on actual surveys but on the general information and maps at hand. This estimate was \$250,000. The estimated cost per cubic yard was liberal and a large amount was included for contingencies. It included the cost of 6 miles of collecting ditches for the west side and of a channel leading to the Straits with a capacity of 200 second feet. This would be needed when water was pumped out of the sump. It did not include the cost of any pumps.

In addition to the above several miles of ditch would be needed in the interior of the sump so that when it became necessary to flush it out water could be conveyed to the pumping plant at the north end. The southern end of the sump is the lowest. The action of the waves on the highway fill across Miller Lake indicates that a considerable sum would need to be expended to protect a portion of the dike against

erosion. These items would tend to offset any liberality that may occur in the estimate made by the Bureau of Reclamation.

Pumping Plant.

Part of the pumping plant would care for the return flow from the Klamath Drainage District and another part would be used to empty the sump when the water became too alkaline. Although probably a difficult matter it was assumed that the latter could be so designated and arranged with gates and by-passes to permit its use for pumping water from the lands on the west side, since it would be used infrequently for emptying the sump. This plant would be located on the State line and its cost is estimated at \$65,000.

If the land or water on the west side in California were purchased, water from the west side would not need to be pumped. It is a difficult matter to estimate the cost of acquiring these rights but it certainly would not be less than \$125,000 and possibly more. Whether or not this scheme were adopted it would make little or no difference in the cost of dikes, ditches, and pumping plant.

Summary of Cost.

1. Depending on development of lands surrounding the sump for a water supply. If the land on the west side and in the drainage district were fully developed the supply would be sufficient to maintain a sump of about 9,000 acres.

| | |
|-------------------|---------------|
| Dikes and ditches | \$250,000 |
| Pumping plant | <u>65,000</u> |
| Total | \$315,000 |

2. Acquiring rights to land and water on the west side. The area of the sump that could be maintained with this supply would vary widely. Disregarding the possibility of a supply from the drainage district the supply from the west side during a series of dry years, would maintain a sump having an area considerably less than 9,000 acres; during a series of wet years the area would be greater than 9,000 acres

| | |
|---|----------------|
| Dikes and ditches | \$250,000 |
| Pumping plant | 65,000 |
| West side land and water not less than | <u>125,000</u> |
| Total | \$440,000 |

Operation and Maintenance.

If the Klamath Drainage District were all irrigated the return flow may amount to 27,000 acre feet all of which would have to be pumped. Even though there might be some doubt regarding its development, as a possible contingency, it is necessary to use this figure both for estimating the cost of the plant and the annual cost of pumping.

1

The cost of pumping out the sump to prevent the concentration of alkali would vary to some extent with frequency and rate at which the sump must be emptied. In this report it has been assumed that it would be necessary to empty it within a period of about two months which would require pumps of large capacity. On a basis of acre-feet pumped the fixed charges such as depreciation and minimum power charges would be very high. This of course would not be true if this portion of the plant were used for pumping water from the west side but in this case the actual amount of power used would be much greater.

The annual cost of pumping from the drainage district, the west side and occasionally flushing out the sump is estimated at \$17,000. If all of the water from the west side had to be pumped during unusually heavy run-off in the spring the cost might greatly exceed this amount.

The annual cost of pumping from the drainage district and occasionally flushing out the sump is estimated at \$14,500.

Dikes sometimes break. If this one should break when the water in the sump was rather high it might flood several thousand acres in the southern portion of the Klamath Drainage District. In any event the dikes would need frequent inspection and occasionally considerable repairs and the ditches would need to be cleaned. This is estimated at an average annual cost of \$3,000.

The total cost of operation and maintenance would be as follows:

1. Including pumping from the west side.

| | |
|----------------------|--------------|
| Pumping | \$17,000 |
| Maintenance of dikes | |
| and ditches | <u>3,000</u> |
| Total | \$20,000 |

2. Not including pumping from the west side.

| | |
|----------------------------------|--------------|
| Pumping | \$14,500 |
| Maintenance of dikes and ditches | <u>3,000</u> |
| | \$17,500 |

ACKNOWLEDGMENT.

It is desired to express appreciation, for the data that have been supplied by the Klamath Office of the Bureau of Reclamation and the Portland Office of the U.S. Geological Survey.



U. S. DEPARTMENT OF AGRICULTURE

Office of Information

Press Service



Release - Immediate.

November 5, 1927.

REFLOODING OF LOWER KLAMATH LAKE HELD IMPRACTICABLE

It has long been the hope of conservationists that some arrangement might be made by which a program could be undertaken for reflooding Lower Klamath Lake, which was at one time a splendid waterfowl breeding and feeding ground, lying partly in southern Oregon and partly in northern California. By reason of the use of the water of Klamath River in recent years for irrigation of agricultural lands and also for power, water has been lacking to keep the marshes of Lower Klamath Lake habitable for waterfowl.

A study was made this year by L. T. Jessup, an irrigation engineer assigned by the Bureau of Public Roads to the Biological Survey, of the United States Department of Agriculture, to determine the practicability of a reflooding program. At a conference held in Klamath Falls, Oreg., on September 27 and 28, by Paul G. Redington, chief of the Biological Survey, with representatives of the California and Oregon Game commissions, the report of the engineer was rendered. The many obstacles that preclude further consideration of the project were there brought out.

In the first place, the full supply of water from the Klamath River is needed for existing and projected irrigation plans and for power use. In the second place, legislation of the States of Oregon and California, which ceded the lands involved to the Federal Government for use as a reclamation project, stipulated that the water should be used for irrigation purposes. In the third place, even if water were available, it is held that the reflooding of Lower Klamath Lake would be detrimental to agriculture in the immediate region, and the cost of necessary project works, such as dikes and pumping plants, and the purchase of privately owned lands, would run into a very large figure.

At the conference held in Klamath Falls it was decided to drop consideration of the reflooding program in the Lower Klamath region and to concentrate the efforts of sportsmen and others interested throughout the country on the :

restoration work to be done on the Bear River Marshes, at the northern end of Great Salt Lake, in Utah. Here it is possible by diking to establish large areas of fresh water, which when completed will not only furnish breeding and feeding grounds for a very large number of waterfowl but will operate to decrease the mortality that has been so serious among the birds for many years.

The Chief of the Biological Survey, in commenting on this general situation, stated that the news of the abandonment of the Lower Klamath Lake project would be disappointing to many sportsmen and conservationists of the country who had banked on the reestablishment of an important waterfowl concentration area there. Continuing, Mr. Redington said, "I am very sorry to be the harbinger of this bad news, since I am well aware of the great interest displayed by thousands of sportsmen and bird lovers in the project, but the obstacles to reflooding Lower Klamath Lake appear to be of an insuperable nature. Copies of the engineer's report on the project are to be given to many of the organizations that have been behind this project, and it is my opinion that after reading the report their judgment as to the unfeasibility of the project will coincide with the judgment of the Oregon and California fish and game commissions and with that of the Biological Survey.

"We are daily expecting the report of our engineer who has been working for the past few months on a plan to construct additional dikes on the Bear River Marshes in Utah. We know that this sort of restoration work is entirely possible since the State Fish and Game Commissioner of Utah, Mr. Madsen, and certain duck clubs owning land on the Bear River Marshes have already by diking established such areas.

"The State of Utah has by legislation consented to the establishment of a Federal project, which, when completed, will comprehend more than 100 square miles of fresh-water marshland territory for wild fowl, and it is our hope that this project may be consummated in the near future. Valuable not alone as a breeding ground but for feeding and resting, it is as important a concentration area as any that can be found throughout the United States, and it is imperative that action be had to remedy the conditions that for the past decade or so have caused such a heavy mortality of the ducks and other waterfowl in the lines of the great western migration."

Mr. Redington further stated that the engineering examinations of the Bear River Marshes in Utah and the Lower Klamath and Malheur Lakes in California and Oregon would not have been possible but for the generosity of western sportsmen, who raised a fund of more than \$6,000, which permitted the Biological Survey to obtain the services of competent engineers.

INCLOSURE

24529

FROM

DEPARTMENT OF AGRICULTURE,

BUREAU OF BIOLOGICAL SURVEY.

Bi-1222

8-3365

(COPY)

(COPY)

THIS AGREEMENT made this Twenty-fourth day of February, 1917, in pursuance of the Act of June 17, 1902 (32 Stat., 388) and acts amendatory thereof and supplementary thereto, between the United States of America, hereinafter styled the United States by Franklin K. Lane, Secretary of the Interior, and the California-Oregon Power Company, a California corporation, hereinafter styled the Company.

Witnesseth:

Whereas, the United States pursuant to the said acts is now engaged in the reclamation and irrigation of lands lying in the State of Oregon and in the State of California in the vicinity of Klamath Falls, Oregon, known as the Klamath Project, and

Whereas, an Act of the Legislature of the State of Oregon approved January 20, 1905 (Chap. 5 General Laws of Oregon, 1905, P. 63) authorized and empowered the United States to lower the water level of Upper Klamath Lake, Klamath County, Oregon, and to use any part or all of the bed of said lake for the storage of water in connection with the operations of irrigation and reclamation conducted by the Reclamation Service of the United States, and

Whereas, the Company has offered to construct a dam at or near the outlet of the Lake for the purpose of regulating the level of the lake in such manner as may be deemed advisable by the United States for purposes authorized by the laws of the United States and of the State of Oregon,

Now therefore, The parties hereto agree-

1. The Company acting for and on behalf of the United States, may at its option construct a dam on Link River at or near the outlet of Upper Klamath Lake for the purpose of controlling and regulating the waters of the Lake and the flow in Link River and may operate and maintain said dam for a period of 50 years from the date hereof subject to the conditions hereinafter provided. The said dam and the appurtenances thereof, including the land upon which it is situated, shall be the property of the United States, and the Company hereby undertakes and agrees to acquire and convey to the United States such land, the title to which is not now in the United States, as will be occupied by said dam and as may be necessary for its construction, maintenance and operation.

If said Company elects to build said dam as herein provided, said Company must, within two years from date hereof, notify the Secretary of the Interior in writing of its election so to do, and the Company shall thereupon become bound by all of the conditions and obligations of this contract with reference to said dam and the regulation of the water levels of Upper Klamath Lake. If such written notice is not so served within said period, then all rights and obligations of the Company under this contract, other than with regard to the lease of the Keno Canal and the provisions regarding the sale of power, shall immediately cease and terminate. The promise of the Company to supply power and to lease the Keno Canal, as herein provided, shall be deemed sufficient consideration for the option to erect and maintain said dam.

2. Said dam shall be constructed according to plans and specifications approved by the Director of the Reclamation Service and under the supervision of that Service. The top of said dam shall ultimately have an elevation of 4143.3 above sea level according to the datum of the Reclamation Service, to which all elevations hereinafter stated are referred, and shall be so located as to protect the intake of Keno Canal of the Reclamation Service and permit a flow of water therein to its full capacity. The dam shall be so constructed that at its various stages it will permit at all times a maximum outflow not less than 6,000 cubic feet per second.

3. The Company, after constructing said dam, may regulate the water level of Upper Klamath Lake between elevations 4143.3 and 4137, but the water level shall not be raised above elevation 4143.3 and shall not be lowered below elevation 4137. Within two years from the date of this contract the Company must elect whether or not to construct said dam, and within one year after such election the dam shall be so constructed as to permit of the raising of the elevation of the lake to a height of 4141.5, and within 10 years shall be constructed to its ultimate elevation for providing a lake level of 4143.3. The Company may be permitted to lower the level of the lake to below 4137 at such times and upon such conditions as may be satisfactory to the Secretary of the Interior.

4. If the Company elects to build the dam, the Company shall at its own expense deepen the approach channels to the Main and Keno Canals of the Reclamation Service, to the satisfaction of the Secretary of the Interior so far as necessary to insure a flow of not less than 1200 cubic feet per second during June, July and August, and 1000 cubic feet per second at all other times into Klamath Project main canal and not less than 1020 cubic feet per second into Keno Canal with water of the lake at an elevation of 4137.

5. The lowering and raising of the waters of the lake below or above the normal fluctuations while in a state of nature shall be undertaken by the Company only after making satisfactory adjustments at its own expense in regard to all interests which may be affected thereby, whether of the State for navigation or other purposes, or of any private individuals, or Indians.

6. The Director of the Reclamation Service through the authorized representative of said Service on the project shall specify from time to time the lowest permissible limit for the lake level to protect the requirements of the project, and whenever the lake level drops to a point two-tenths of a foot above such level, such representative shall assume control of the dam and its outlets and continue in control so long as the lake level remains at or below that elevation.

7. The Company assumes any and all liability for damage to the property or rights of any person or corporation or the property

or rights of the State of Oregon or of the Indians due to the operation of said dam by said Company or to the regulation and control of the levels of said lake by said Company and hereby undertakes to hold the United States harmless from any and all liability for damage due to such regulation and control.

8. At the end of the 50-year period of the Company's control and operation of the dam all rights hereunder shall terminate.

9. In consideration of the rights and benefits accruing to the Company by reason of the control and operation of the dam, the Company hereby agrees to furnish electric power during the 50-year period of its control of the dam for all pumping requirements for the irrigation or drainage of lands deriving their water supply from or in connection with the works of the Klamath Project, or otherwise made part of the Project by the Secretary of the Interior, within 25 miles from the town of Merrill, Oregon, at a rate of 7 mills per kilowatt hour. In the case of the power for the drainage of Tule Lake the charge for the power shall be 7 mills per kilowatt hour between the hours of 6 p. m. and 11 p. m. and at the rate of 5 mills per kilowatt hour during other times of the day. All such power shall be delivered by the Company at its own expense wherever there is an installation for such pumping purposes of 100 horse-power or more, for at least 2 years business at an average load factor of at least 50%. The electric current supplied shall be in such form as to be available for the pumping requirements of the project. In case the commercial

rates for power at any time are lower than the said rates for a like service, the commercial rates during such time shall supersede those herein stated. This rate does not extend generally to pumping by private individuals, but only to pumping by the United States or by the Water Users' Association, or other successor in interest of the United States, or to organizations or individuals pumping water to any lands of the project as described in this section.

10. Nothing in this agreement shall curtail or be in any wise construed as curtailing the present rights of the United States to the waters of Upper Klamath Lake and its tributaries or the lands under or along the margin of the lake.

11. The failure of the Company to comply in their true intent and meaning with any of the provisions of this contract in regard to the construction, operation, and use of the dam at the outlet of Klamath Lake during the 50-year period shall render this contract in regard to said dam subject to cancellation by the Secretary of the Interior upon 60 days' written notice to the Company stating the cause for such proposed cancellation and in case of failure or refusal of the Company to comply with the provisions of this contract within the period allowed by the Secretary of the Interior he may cancel this contract as to such dam. After such cancellation the Company shall have no further rights in regard to the use of the said dam and its appurtenances, the operation and control of which shall immediately pass to the United States.

12. The United States hereby leases to the Company for a period of 10 years from the date of this contract at an annual rental of \$1,000 per year the Keno Canal of the Klamath Project together with its appurtenances, and so far as may be authorized under the laws of the State of Oregon the right to the use of 815 cubic feet of water per second therein, in addition to the 205 second-feet which the Company now claims as successor to the Moore Bros. and is using; Provided, That such additional right to the use of 815 second-feet shall be subordinate to the water rights deemed necessary for the Klamath Project as determined by the Director of the Reclamation Service. The aforesaid rental shall be payable annually in advance, the first of which payments shall be due at the date of the signing of this contract, and said lease shall be subject to the conditions hereinafter stated. The Secretary of the Interior shall have the right in his discretion to renew this lease of the Keno Canal after the expiration of said ten-year period for a further period of ten years, on the same terms.

13. The Company may use the said canal for power purposes subject to the obligation heretofore assumed by the United States in connection with the delivery of 205 second-feet of water through said canal, and shall maintain it at all times in good condition satisfactory to the Secretary of the Interior.

14. The Company shall be permitted to make such improvements in the Keno Canal at its own expense as may be approved by the Secretary

of the Interior, and all plans and specifications for such work shall be subject to the approval of the Director of the Reclamation Service, and the work performed shall be under his supervision. Any further improvements made by the Company as to which the Secretary of the Interior expressly declares that the Reclamation Service shall bear one-half the reasonable cost, shall be a credit on account of the rental charge paid and payable hereunder up to the limit of such charges, and any additional amount of such one-half share shall be paid to the Company by the Reclamation Service. At the termination of the said 10-year lease period all rights secured hereunder for the use of said canal and of 815 cubic feet of water per second and all appurtenances together with all improvements made by the Company as a result of this lease shall revert to the United States and the Company shall not be authorized to exercise any further control thereof. Nothing in this contract shall abridge or be construed to abridge, or affect in any way the rights which the Company now has in said canal and in and to the waters flowing therein and in Link River.

15. The Company assumes any and all liability for damage to property or rights of any persons or corporation due to the construction, operation or maintenance of the said Keno Canal while under lease to the Company or to any work which it may cause to be done thereon and hereby undertakes to hold the United States harmless from any and all liability for damage due to its occupation and use of the said canal or to any work which it may cause to be done thereon.

16. All payments herein provided for shall be made to such officer of the Reclamation Service as may be designated by the Director and in case of failure to make any payment when due the Company will pay interest thereon at the rate of 10 per cent per annum up to the date of payment.

17. The failure of the Company to comply with any of the provisions of this contract as to the 10-year lease of Keno Canal in their true intent and meaning, shall render the lease of the Keno Canal as herein provided subject to cancellation by the Secretary of the Interior upon 60 days' written notice to the Company, stating the cause for such proposed cancellation and in case of failure or refusal of the Company to comply with the provisions of this contract within the period allowed by the Secretary of the Interior, he may cancel this contract as to said canal. After such cancellation the Company shall have no further rights in regard to the use of the Keno Canal as herein provided, but such cancellation shall in no wise curtail or affect the rights which the Company now has in said canal and in its waters and in the waters of Link River.

18. The provisions of this and the following paragraph refer to the work on both the dam and the canal. In all construction work eight hours shall constitute a day's work. It is expressly stipulated and agreed, in accordance with the provisions of the Act of June 19, 1912 (37 Stat., 137), that no laborer or

mechanic doing any part of the work contemplated under this contract, in the employ of the contractor or any subcontractor contracting for any part of the work contemplated to be performed hereunder, shall be required or permitted to work more than eight hours in any one calendar day upon such work. No Mongolian labor shall be employed under this contract. The importation of foreigners and laborers under contract to perform labor in the United States or the District of Columbia is prohibited. (Sec. 3736 Rev. Stat. U. S.; Acts, Aug. 1, 1892, 27 Stat., 340; June 17, 1902, sec. 4, 32 Stat., 396; Feb. 26, 1865, 23 Stat., 332; Feb. 23, 1867, 24 Stat., 414). In the performance of this contract no persons shall be employed who are undergoing sentences of imprisonment of hard labor imposed by courts of the several States or municipalities having criminal jurisdiction. (Executive order, May 18, 1905).

19. No member of or delegate to Congress, or Resident Commissioner, after his election or appointment, or either before or after he has qualified and during his continuance in office, and no officer, agent, or employee of the Government, shall be admitted to any share or part of this contract or agreement, or to any benefit to arise thereupon. Nothing, however, herein contained shall be construed to extend to any incorporated company, where such contract or agreement is made for the general benefit of such incorporation or company, as provided in section 116 of the Act of Congress approved March 4, 1900 (35 Stat. L., 1109).

In witness whereof the parties have hereto set their hands
and the seal of the Company is hereto affixed.

United States of America By

E.C.F. W.R.K.
 A.P.D.
 M.B.

Franklin K. Lane.

California-Oregon Power Company

(Corporate Seal)

By Alex. J. Resborough,

Vice-President.

(COPY)

(COPY)

X

690.0326
KLAMATH

DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
KLAMATH IRRIGATION PROJECT

1. This contract, made June 23, 1930, in pursuance of the Act of June 17, 1902 (32 Stat., 388), and acts amendatory thereof or supplementary thereto, between the United States of America, herein styled the United States, represented by the contracting officer executing this contract, and The California Oregon Power Company, a California corporation, hereinafter styled the Company.

WITNESSETH:

2. WHEREAS, the Company has constructed and is operating the Link River Dam, Klamath Project, and to better effectuate and regulate the release of water in the Klamath River at Keno Reefs, the Company proposes to construct additional regulatory works consisting of a needle type dam at Keno and for this purpose desires a right of way over certain lands purchased by the United States in connection with the construction of the project, and known locally as the McCormick Site, and

3. WHEREAS, the construction and operation of the additional works, under the conditions and stipulations herein set forth, will not be prejudicial to the interest of the United States.

4. NOW, THEREFORE, in consideration of the premises and the faithful performance by the Company of the covenants on

its part to be kept and performed, the United States does hereby grant to the Company, solely upon and subject to the conditions hereinafter set forth, a right of way over and across the following described land with the right to use, abut upon, and cut through said land, for a period of fifty (50) years from the date of this contract and at a rental charge of one thousand dollars (\$1,000) to be paid in full by the Company upon execution of the contract:

All that portion of Section Thirty-six (36) Township Thirty-nine (39) South, Range Seven (7) East, Willamette Meridian, and that portion of Section Thirty-one (31), Township Thirty-nine (39) South, Range Eight (8) East, Willamette Meridian, described as follows:

Beginning at a point on the easterly line of said Section Thirty-six (36) from which the Southeast corner of said Section Thirty-six (36) bears south 1796.4 feet; thence North along the easterly line of said Section Thirty-six (36), 57 feet; thence North $46^{\circ} 13'$ East 485 230 feet to the center line of Klamath River; thence North $43^{\circ} 47'$ West along the center line of Klamath River 625 feet; thence South $46^{\circ} 13'$ West 320 feet to the westerly shore line of Klamath River; thence along the said westerly shore line South $43^{\circ} 47'$ East 465 feet; thence south $46^{\circ} 13'$ West 358 feet; thence south $47^{\circ} 30'$ East 177.8 feet; thence South $52^{\circ} 30'$ East 22.9 feet; thence North $46^{\circ} 13'$ East 393.3 feet to the place of beginning.

The above described tract of land contains an area of 6.2 acres more or less as shown approximately on Plat No. 5081-A attached to and made a part of this contract.

5. The plans and specifications for the additional works shall be submitted to the chief Engineer of the Bureau of Reclamation and be approved by him before work is commenced

and all work done shall be in accordance with such approved plans and specifications.

6. The right of way herein granted is expressly subject to the conditions: (first) that the water in the river at Keno Reefs will not be lowered below the normal height, which for the purpose of this contract is fixed at elevation 4085.0; (second) that the Company shall be liable and will make reimbursement for any damages caused by reason of water levels, in Klamath River and the Lost River Diversion Channel, higher than would have obtained had no structure been built; (third) that the United States or its successors in control of the operation of the Lost River Diversion Channel may, at any time, through its or their authorized representatives, upon one day's notice to the Company, assume control of the operation of the regulatory works to be constructed by the Company at Keno Reefs and operate such works in a manner that will remove any interference with the functions of the Lost River Diversion Channel when, in the opinion of such representatives, the operation of such works as conducted by the Company reduces the capacity of said diversion channel below that desired to be used; and (fourth) that suitable provision shall be made by the Company which, in the opinion of the Chief Engineer of the Bureau of Reclamation, will permit the necessary diversion of water for power purposes at the so-called McCormick site. The

decision of the Secretary of the Interior as to whether any of the conditions of this paragraph are being complied with by the Company or as to the authority of the representative of the United States or its successors in control of the operation of the Lost River Diversion Channel acting as above provided, shall be final and conclusive.

7. The Company agrees that it will be responsible for any and all injury or damage to any person or property incident to or in consequence of the construction and maintenance of the additional works, or for any damage, direct or indirect resulting from the use of said lands.

8. The rights and privileges herein granted may be forfeited and annulled on written notice by the Secretary of the Interior for violation or breach of any of the terms and conditions herein named.

9. The provisions of this contract shall apply to and bind the successors and assigns of the parties hereto.

10. It is further stipulated and agreed that in the performance of this contract no persons shall be employed who are undergoing sentences of imprisonment at hard labor which have been imposed by courts of the several states or territories or municipalities having criminal jurisdiction.

11. No member of or Delegate to Congress or Resident Commissioner shall be admitted to any share or part of this

contract or to any benefit to arise therefrom. Nothing, however, herein contained shall be construed to extend to any incorporated company, if the contract be for the general benefit of such corporation or company.

IN WITNESS WHEREOF the parties have hereunto subscribed their names as of the date first above written.

THE UNITED STATES OF AMERICA

By R. F. Walter June 30 1930
Chief Engineer,
Bureau of Reclamation.

THE CALIFORNIA OREGON POWER COMPANY

ATTEST:

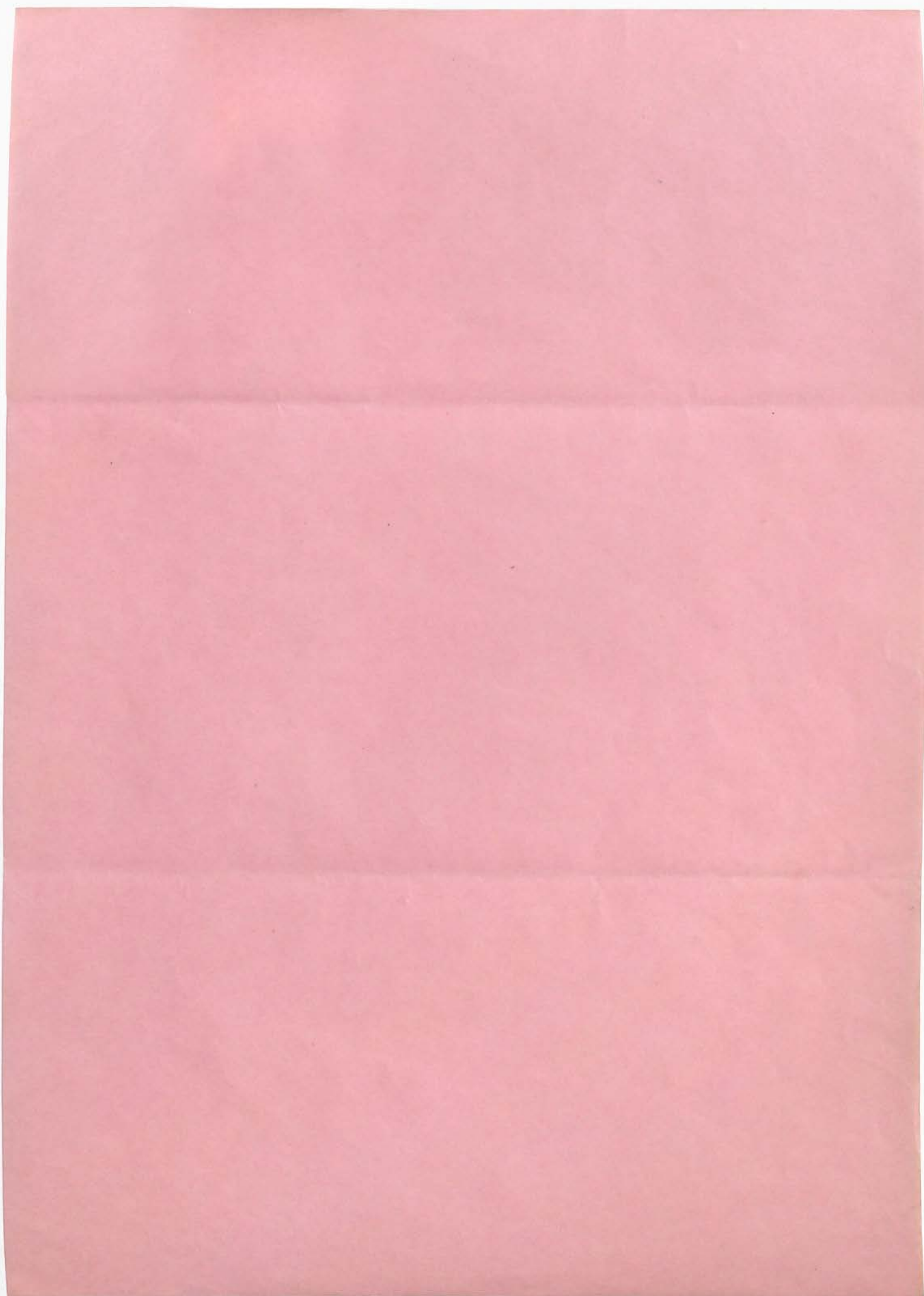
By C. M. Brewer
Vice-President

M. D. Field
Secretary

P. O. Address:

Medford, Oregon

(SEAL)



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
WASHINGTON

OFFICE OF THE COMMISSIONER

JUL -9 1934

Mr. William L. Finley,
Route 10,
Portland, Oregon.

Mr. 30-1917

Dear Mr. Finley:

Reference is made to your letter of July 2 requesting a reply to your inquiry regarding the reflooding of Lower Klamath Lake.

The Executive Order issued by President Theodore Roosevelt was amended by order of May 14, 1915 signed by President Woodrow Wilson. This later order includes all of the lands of the Klamath Drainage District of which only about 7000 acres are government lands. The lands of the Klamath Drainage District, all of which lie within the State of Oregon, are held by 50 individual owners. These lands were all originally purchased from the State of Oregon under the Swamp Land Act. Approximately 2000 acres have been taken in by the district for taxes and re-sold under contract to individuals. The district includes no lands in California. In order to re-establish Lower Klamath Lake, lands within the district would have to be purchased from individual owners. The same holds good for private lands lying within the lake bed in California.

*22d contract
June 25, 1930*

The waters of Klamath River at Ady may be diverted by the Reclamation Bureau for irrigation, but on account of the contract of February 24, 1917 between the United States and the California Oregon Power Company, it is seriously questioned whether the Government has the right to divert for other purposes without agreement by the company. This appears to be a legal question that would undoubtedly have to be settled in court unless a compromise were reached between the interested parties. Storage on the Upper Klamath Lake is controlled by the California Oregon Power Company within certain maximum and minimum elevations set forth in contract of February 24, 1917, with certain limitations as to draw-down prescribed annually by the Bureau of Reclamation, based on irrigation requirements. Storage water is usually drawn off by the company during the winter months in anticipation of accretions during the spring run-off. The annual supply of

water in Upper Klamath Lake, even in the dryest years, has been greater than the irrigation requirement but the disposal of these waters other than for the purposes set forth in the contract mentioned above would doubtless be contested by the California Oregon Power Company.

Very truly yours,

M. A. Schnur
Acting Commissioner.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
WASHINGTON

OFFICE OF THE COMMISSIONER

AUG -6 1934

Mr. William L. Finley,
Route 10,
Portland, Oregon.

My dear Mr. Finley:

This will acknowledge receipt of your letter of July 30 in regard to the Klamath Drainage District. Copy of your letter is being referred to the Superintendent of the Klamath project, who will be able to answer the specific questions raised by you. When reply is received from the Superintendent you will be advised.

Very truly yours,

Elwood Mead
Commissioner.

August 25, 1934

Mr. H. M. Worcester
Box 50
Merrill, Oregon

Dear Worcester:

Received your wire in regard to proposition of grazing Tule Lake Refuge later in the winter time. I understand that in the past it has been considered necessary to get rid of the dead tules each winter in some way, either by grazing or burning, to prevent the gradual filling up of the sump. If conditions remain much the same as in past years, I judge that you will have to get rid of the tules in the easiest way.

I think it advisable to work toward enlarging the area in the Tule Lake Refuge. If we get more land, it will be a question of whether it is best to flood more of an area or keep the sump about as it is.

Since this matter of grazing is going to be carried up direct to Secretary Ickes, we want to get a definite understanding and I feel that it may be best to work toward the elimination of all grazing if possible on wild fowl reservations. I spent an afternoon recently with Senator McNary, and he says that the whole thing will depend upon Ickes. Darling has Secretary Wallace interested, and they are going to fight to get all they can.

Am glad to get the information about Fugate turning his cattle in on the sump area. I am also taking this up direct with Darling to be sure we get immediate action. A thing of this kind has to stop, and the sooner the Biological Survey throws some of these trespassers into court, the better. Darling tells me that Gabrielson will have more authority than in the past, and I think we shall be able to get quicker action on matters that come up. Please keep me informed as I want to see that there is no delay.

Sincerely yours,

WLF:pf

Trespass
Tule Lake
Refuge

Tule Lake Wild Life Refuge.
Box 50 Merrill, Ore.
Aug. 21, 1934

Mr. A. Fugate;
Tulelake, Cal.

Dear Sir:

This is to advise you that at the present time there is grazing on the Tule Lake Wild Life Refuge some 30 head of cattle which were placed on this Refuge by you.

By means of this letter and behalf of the Department of Agriculture, Bureau of Biological Survey, I am requesting the immediate removal of this stock which is grazing illegally thereon.

For your information and guidance I wish to call to your attention Section 145 of the U. S. Code, Title 18 also Section 7151 U. S. Code Supplement 4, Title 16, which are found on page 14 of the enclosed pamphlet, which covers the regulations issued by the U. S. Department of Agriculture, Bureau of Biological Survey. As you know this Refuge area has been set aside by Presidential orders as a resting, feeding and nesting area for migratory birds and the cover on this Refuge must be protected.

Should I again find any of your stock within the boundary of this Refuge, there will be only one course for me to follow and that will be to trespass you in Federal Court.

Very truly yours,

H. M. Worcester,
U. S. Game Management Agent.

c c
Bureau of Bio. Survey
Mr. B. E. Hayden

TELEGRAM

OFFICIAL BUSINESS—GOVERNMENT RATES

DEPARTMENT OF AGRICULTURE

BUREAU of Biological Survey,

CHG. APPROPRIATION _____

GPO 8-5596

Aug. 20, 1934

Bureau of Biological Survey,
Washington, D. C.

Fugate has placed about thirty cattle on sump area at entrance of
Lost River and Refuge positive no agreement with Reclamation have
witness who saw him drive them in about seven days ago advise
proceedure to trespass as this is flagrant violation attention
Henderson.

Worcester.

COPY

| CLASS OF SERVICE DESIRED | |
|--------------------------|----------------|
| DOMESTIC | CABLE |
| TELEGRAM | FULL RATE |
| DAY LETTER | DEFERRED |
| NIGHT MESSAGE | NIGHT LETTER |
| NIGHT LETTER | SHIP RADIOGRAM |

Patrons should check class of service desired; otherwise message will be transmitted as a full-rate communication.

WESTERN UNION

R. B. WHITE
PRESIDENT

NEWCOMB CARLTON
CHAIRMAN OF THE BOARD

J. C. WILLEVER
FIRST VICE-PRESIDENT

1207-A

CHECK

COL GOVT
ACCT'G INFMN.

Straight

TIME FILED

310P

Send the following message, subject to the terms on back hereof, which are hereby agreed to

AUGUST 20 1934

19

To IRA GABRIELSON NEW US COURT HOUSE PORTLAND ORG

Street and No. _____

Place _____

JOHN TAKES TWENTY SEVEN LOUIS KANDRA EIGHTY EIGHT TOM KALMES FORTY

THREE HASKINS BROS ONE ONE NINE COX BROS SIXTY SIX

JOHN KANDRA TWENTY TWO LISKEY BROS SEVENTY FIVE

WORCESTER

*Copy for your huf. This is a copy take
out of production under wheat allotment.
Hugh*

Sender's address
for reference

WESTERN UNION GIFT ORDERS ARE APPROPRIATE GIFTS
FOR ALL OCCASIONS

Sender's telephone
number

September 10, 1934

The Commissioner
Bureau of Reclamation
Washington, D. C.

Dear Sir:

Referring to a letter from your office July 9, 1934, signed by Mr. W. A. Schnurr, I should appreciate some further information.

I had brought up the question as to whether the United States had the right to use the waters of Upper Klamath Lake to flood federal lands to conserve water fowl. I take it from your letter that if the United States owned the bed of Lower Klamath Lake it could not re-flood this area, using the waters of Upper Klamath Lake, without the permission of the California-Oregon Power Company.

From your letter, it appears this is on account of a contract of February 24, 1917, between the United States and the California-Oregon Power Company.

In glancing through this contract I note in paragraph 10:

"Nothing in this agreement shall curtail or be in any wise construed as curtailing the present rights of the United States to the waters of Upper Klamath Lake and its tributaries or the lands along or along the margin of the lake."

What part of this contract do you think can be construed as making it illegal for the United States to use some of this water for the conservation of wild fowl?

I note that the storage on Upper Klamath Lake is controlled by the California-Oregon Power Company within certain maximum and minimum elevations. Do they also control how this water may be used?

Very truly yours,

WLF:PF

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
WASHINGTON

OFFICE OF THE COMMISSIONER

Mr. William L. Finley,
Route 10,
Portland, Ore.

SEP 27 1934

My dear Mr. Finley:

Reference is made to your letter of September 5, in regard to pasturing sheep in close proximity to the wild bird reservations in the vicinity of the Klamath project.

I am requesting our field office to report on this matter and as soon as report is received, I will advise you in regard to the matter.

Very truly yours,

Elwood Mead
Commissioner.

September 27, 1934

Dear Worcester:

I have just received the copy of your letter of September 24, which you sent to Washington. I am glad to get this as it gives a complete statement of the case.

The difficulty is, Crouch does not understand the situation. I don't think he has been on the ground as he told me when I was in Washington that he was not familiar with the situation in your territory.

I am afraid this matter will not reach Darling, and I feel that it is a mistake for the Survey to sanction in any way the grazing of stock on the reservations. I have, therefore, written a long letter to Darling telling him I just returned from Tule Lake Refuge, and telling him the conditions. I am sure he will take a definite stand on the matter as I discussed these things with him while in Washington, and he was in thorough sympathy. However, he has a thousand and one things to attend to and must leave a great many of them to men under him unless special attention is called.

When I returned home I found a letter awaiting me from Darling saying he had not had a hearing before Secretary Ickes as he was still checking up on various facts and it has taken considerable time to gather all the evidence he desires before presenting it. I think this is a good policy, and I believe he will win out in the end.

Jewett is leaving tonight to attend the hearing in Klamath Falls tomorrow on the Taylor Grazing Bill. I wish I could be present, but can't. Please keep me informed about the numbers of geese when they arrive. I'll try to get down a little later on. We had snow and plenty of cold weather from Klamath Falls until after we got over this side of Government Camp. The whole forest was a mass of white looking more like Christmas than September.

Enjoyed the short stay at your house. Many thanks to you and your wife. Hope you both get up this way some time. Haven't had time to run the motion picture film but will do so shortly and send it on to Washington.

Sincerely yours,

WLF:PF

Tule Lake Wild Life Refuge.
Box 50 Merrill, Ore.
Sept. 24, 1934

R
Tule Lake
Refuge
Leases

Chief,
Biological Survey,
Washington, D. C.

Dear Sir:-

Receipt is acknowledged of your letter of Aug. 31,
with regard to grazing leases.

It is apparent that some one not versed with game
conditions on the Refuge has made a report to you with re-
ference to the grazing of live stock on the Tule Lake Wild
Life Refuge.

It is stated that the lease is entered into and the
stock enters the Refuge after all possibility of interference
with bird life has passed, this is not a fact for the follow-
ing reasons. There is 42 acres of dry land within the Refuge
where Lost River enters. This small area covered with knee high
grass is constantly used by migratory game birds, first in the
spring as a place where they can graze grass unmolested on their
way North, next by the nesting of ducks, Canada geese, Black
Necked Stilts, Avocets and other shore birds. The colony of
Stilts and Avocets which used the area this year, alone is
enough to prohibit grazing thereon from a bird standpoint. Next
comes the fall migration and on Aug. 15th this year the grain
lessee^s surrounding the Refuge complained and wanted relief from
the damage being done by the White Fronted geese that had al-
ready arrived here. At the present time this small acre^e
within the Refuge is the only green grass area available to the
birds unmolested. Shortly upon the arrival of the large mig-
ration of ducks and geese the area will be literally covered
with bird life and on a place where they cannot be chased.

With reference to the burning of vegetation during
the winter months by the Reclamation Service I wish to state,
that each winter until the winter just passed I have person-
ally burned the tules during the dead of winter and at a time
when I could drive my car over the ice on the Refuge. At this
time the fire does no damage to the roots or other low vegeta-
tion which is protected by the ice and does not burn the dry
land area mentioned above. The past year the entire Refuge was
leased for \$250.00 prior to the opening of the hunting season,
and after a lot of criticism had been directed at the Reclama-
tion Service by the local sportsman and other, (see clipping

inclosed) the water in the Refuge raised for some reason and the cattle men were unable to use this swamp area on which to graze their stock. On Dec. 4, 1933 I called Mr. Hayden and asked permission to burn tules on Refuge and he advised me that he did not want the Refuge burned on account of the lease which did not expire until Dec. 31, 1933. Had the Refuge been burned at this time it would of been very beneficial to nesting water fowl for the heavy mat of tules in the swamp does not permit the free use of the water area by the birds, yet after burning in the winter there is plenty of tule mats left for nesting and this would accomplish the sole purpose for which the Reclamation lease and that is to destroy this heavy growth which they claim is filling up the sump area. On March 15th the sump area was completely burned by the Reclamation Service, this at a time when the birds had started to nest. This was especially true of the Chinese Pheasants and a homesteader reported the hogsw Mr. Hayden Reclamation Supt., starting the fires and that he also observed many dead birds which were unable to escape the fire. I was informed at this time by Mr. Hayden that the fire got out of control of a farmer on the East side. This late burn scared thousands of nesting birds from the sump area and burned all vegetation to the waters edge.

The statement that the rancher^s in the vicinity of this Refuge are suffering from the drouth is ridiculous for never in the history of the valley have the crops been so abundant. The inclosed clippings containing statements from the Reclamation Supt., that we have an ample water supply, that two lessees have sold from 60 to 70 thousand sacks of barley with a yield of 2 ton to the acre is sufficient proof that this statement was in error.

This morning Mr. Wm. Kandra, the son of a large lease holder near the Refuge stopped at Headquarters and protested that a large number of geese are feeding in his stubble field, (this field contains over one thousand acres). What the outcome would be is apparent if the vegetation is also taken by stock on the Refuge, we could expect a complaint from every holder of land in this district for the geese and birds then would have no place to rest and feed in migration or nest with some cover and they would cease to visit this district.

I would strongly recommend that if possible our Dept., continue the attempt to exclude grazing at all time of the year on this Refuge. That we should promise the Reclamation that each winter or at a proper time, that we will burn the tule growth on this Refuge and in return we can feel assured that we are saving for bird life a nesting and resting area that has no equal in this district.

Very truly yours,

H. H. Worcester:
Game Management Agent.

COPY

*Reclamation
Service*

THE SECRETARY OF THE INTERIOR

Washington

Returns to Wm Finley

Dec. 31, 1935.

The Honorable,

The Secretary of Agriculture.

My dear Mr. Secretary:

Reference is made to your letter of December 19 enclosing three copies executed by you of cooperative agreement between the Bureau of Reclamation and the Biological Survey for the administration of reclamation projects which are also bird and wildlife reservations and refuges.

The agreement has been executed by me in triplicate, and, as requested, an executed copy is enclosed herewith for your files.

Sincerely yours,

/s/ Harold L. Ickes

Secretary of the Interior.

Enclosure 770272

*Copy sent to
Jewett and Garfield - Nbw*

MEMORANDUM OF AGREEMENT BETWEEN THE
SECRETARY OF THE INTERIOR AND THE SECRETARY OF AG-
RICULTURE RESPECTING ADMINISTRATION OF RECLAMATION
PROJECTS WHICH ARE ALSO BIRD AND WILDLIFE RESERVA-
TIONS AND REFUGES.

To the end that the administration of reclamation projects which also constitute bird and other wildlife reservations and refuges may be adjusted in the interests of irrigators and the conservation of wildlife, the Secretary of the Interior and the Secretary of Agriculture have agreed upon the following principles to govern their respective services administering said projects, reservations, and refuges:

1. The Biological Survey of the Department of Agriculture will prepare land use maps and specifications for each refuge located on Reclamation areas and will furnish to the Bureau of Reclamation such detailed information concerning the land and water use as may best serve the objectives for which the refuge was established. Grazing and agricultural leases of land that is included in Reclamation areas on which wildlife refuges have been established will be drawn in so far as possible consistent with the requirements of the irrigators to conform to the requirements for wildlife as set forth in the specifications furnished by the Biological Survey. The grazing and agricultural leases of said lands will be executed by or on behalf of the Secretary of the Interior, but before being executed drafts of such proposed leases which are at variance with the wildlife use program will be submitted to the Biological Survey and an opportunity afforded for such readjustments in the provisions of the contract as may be mutually agreed upon, but the paramount reservation for reclamation purposes and the contractual rights of persons interested therein shall be protected to the satisfaction of the Secretary of the Interior.

2. The Biological Survey may fence such areas within refuge boundaries as may be necessary to protect the nesting population and shall keep closed these areas only so long, and to the extent, as may be required to maintain an adequate nesting cover.

3. The Bureau of Reclamation, where possible, shall save a minimum supply of water in reservoirs or sumps for wildlife purposes.

4. The Biological Survey may, with the consent of the Bureau of Reclamation, make small dams on public lands in depressions adjacent to reservoirs where water levels may be maintained unaffected by irrigation activities, where such small areas to be held in permanent marsh for wildlife food production value do not materially reduce the water supply of the reservoir.

5. The Biological Survey may institute and conduct reforestation and range recovery practices for the preservation or development of necessary cover for wildlife.

6. When an irrigation project is finally released or sold to a local Water Users' Association or Irrigation District, a definite statement shall be included in any contract entered into subsequent to the date of this memorandum of agreement, or prior to said agreement if the contract holders consent, as to the extent and nature of the bird or wildlife reservation or refuge reservations attached to the lands or waters, and the Biological Survey shall be permitted to examine all such contracts before final signature.

7. In all final releases or sale of irrigation projects as to which contracts have been entered into subsequent to the date of this memorandum of agreement, there shall be reserved in the contract, by and with the consent of the contracting district or association, the right of the United States to establish a bird or wildlife refuge on the lands of the said project.

8. Permits, if any, to take wildlife on refuge areas will be issued exclusively by the Biological Survey and said Survey shall have the right to control all trespass that may affect, directly or indirectly, wildlife, saving to the Bureau of Reclamation and the water users the right to remove burrowing animals menacing levees, canal banks, or reservoirs, under the supervision of the Survey.

9. All waste waters from any irrigation project beyond present or future irrigation requirements of Federal irrigation needs shall, so far as permitted by law, accrue to the use of the Biological Survey for the benefit of migratory waterfowl, and in all developments and contracts for reclamation projects subsequent to the date of this memorandum of agreement, the Biological Survey shall have the right to become a party to the development or the contract and assume its proportionate liability for any water that it may desire to use for migratory waterfowl purposes.

10. All new rumps created by reclamation activities shall be held for reservation for such waterfowl refuges as may be established thereon by Executive Order, upon such terms of reimbursement of the Irrigation Districts, so far as their interests may be involved, as shall be agreed upon by the Biological Survey and such Districts.

11. The Department of Agriculture will deputize reclamation reservoir superintendents as deputy game management agents and the Bureau of Reclamation will charge their agents on any reclamation project that is also a bird or wildlife reservation or refuge with the responsibility, so far as consistent with their other duties, to protect the wildlife and to cooperate with the Biological Survey in every way feasible for the advancement of the

- 4 -

interests of such wildlife.

(Signed) Harold L. Ickes
Secretary of the Interior

(Signed) Henry A. Wallace
Secretary of Agriculture

December 19, 1935.

April 24, 1934

Mr. Elwood Mead
Commissioner, Bureau of Reclamation
Washington, D. C.

My dear Mr. Mead:

Many thanks for your letter of April 13, in regard to the Klamath Drainage District. You will perhaps remember that Dr. Nelson and I had this matter up with you a number of years ago. At the time I got the impression that if this area, which was originally under control of the Reclamation Service and was later set aside as a federal wild bird reservation, proved to be of poor value from an agricultural standpoint that some arrangement might be made to restore the place for water fowl.

On the other hand, the Klamath Drainage District has a contract and if they have kept up their payments, I judge no one else has any control over the matter.

I don't know whether you want to answer this question or not, but if money was available to pay the Klamath Drainage District what they have put into this project, is there any way open to bring about a deal through the departments of the government? Or is that out of the hands of any governmental agency?

As you perhaps know, Lower Klamath Lake Reservation was formerly of great value to the Pacific Coast from the standpoint of water fowl. I have always felt that it was of more public importance to hold this area as a lake and swamp land, rather than to dry it up and try to use it for agriculture.

Through the passage of the Duck Stamp Tax, certain funds will be available for the purchase of sanctuaries for water fowl. I realize that Lower Klamath Lake is a problem, both on account of its present status and also the water supply.

Can you tell me whether the properties of the Klamath Drainage District are all within the border known as Lower Klamath Lake Reservation set aside by Special Executive Order of President Theodore Roosevelt? I take it for granted that the land under control of the Klamath Drainage District does not include the southern part of the bird reservation, which I suppose is still under the control of the Reclamation Service.

Do you know the approximate number of land owners on this project within the State of Oregon? What is the status of the titles to these lands? Were they purchased under contract from the Klamath Drainage District? Or, do the owners hold the titles outright under Swamp and Overflow Patents from the State of Oregon? Approximately how many land owners on this project are there on the California side?

If an attempt were made to restore Lower Klamath Lake Reservation by purchasing the lands within the border, would the purchases have to be made from various individuals, or from the Klamath Drainage District?

What is the status of water rights of the water of the Klamath River at the dykes at Ady? Have these rights all been taken up by the California-Oregon Power Company, or is any water available to pass through the dykes if the lake bed was owned by the government?

In the Reclamation Service where, for example, you have water stored in Upper Klamath Lake to supply the Klamath Irrigation Project, is it possible to use water to supply the needs of water fowl? I judge water would not be available during the summer time when it was needed for irrigation, but I should think some water would be available during the winter time unless it was all needed to fill up the reservoir. Is there an over supply in Upper Klamath Lake at any time in the year?

Sincerely yours,

WLF:PF

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
WASHINGTON

OFFICE OF THE COMMISSIONER

APR 13 1934

Mr. William L. Finley,
Route 10,
Portland, Oregon.

My dear Mr. Finley:

In response to your letter of April 6, 1934, I am pleased to furnish you the following information relative to the contracts between the United States and the Klamath Drainage District:

The contract value of the November 30, 1917, contract is \$104,898.15. This amount includes the sum of \$11,111.12 covering the district's share of the cost of carrying Van Brimmer water in perpetuity. The district paid this sum in four instalments in the years 1918 to 1921, inclusive. This left \$93,787.03 to be paid over a long term of years. To date the district has paid \$43,892.25 on this obligation, leaving \$49,894.78 yet to be accrued. The district has made no payment since 1931, but is not in arrears because it accepted the moratorium acts deferring construction charge payments for the years 1931, 1932 and 1933. Under the provisions of the moratorium act, interest in the amount of \$941.26 was added to the contract value and the remainder of the contract value to be paid, \$50,836.04, will be accrued in annual instalments of \$3,282.54 in the years 1934 to 1944, inclusive, and \$4,909.31 in the years 1945 to 1947. Another moratorium act has just been enacted deferring the 1934 charge to the end of the repayment period. The district has an advance credit of \$2,414.98, representing money paid on the 1931 construction charge.

Under the \$50,000 contract for a water supply, the district has paid \$17,000. The 1931, 1932 and 1933 construction charges have been deferred and the district is not in arrears. Under the moratorium act, interest charges of \$716.88 were added to the contract value, and the balance to be paid, \$33,716.88, will be accrued in annual instalments of \$2,500 in the years 1934 to 1942, inclusive, and \$3,738.96 in the years 1943, 1944 and 1945. The district has an advance credit of \$1,744.26 (1931 payment) under this contract.

Very truly yours,

Edwood Mead
Commissioner.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
WASHINGTON

OFFICE OF THE COMMISSIONER

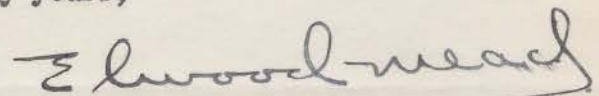
MAY -3 1934

Mr. William L. Finley,
Route 10,
Portland, Oregon.

My dear Mr. Finley:

I have received your letter of April 24 and in view of the various questions submitted by you on which there is no definite information in the files of the Washington office it is necessary to refer your letter to the Superintendent of the Klamath project. As soon as his report has been received you will be further advised.

Very truly yours,


Commissioner.

Klamath file

July 30, 1934

The Commissioner
Bureau of Reclamation
Washington, D. C.

Dear Sir:

I have your letter of July 9, in regard to Lower Klamath Lake. From this I understand that the Klamath Drainage District lies entirely within the State of Oregon. Is the California boundary line the southern boundary of this District? Approximately how many acres in the District? I note that about 7000 acres are government lands.

I note that on account of the contract of February 24, 1917, between the United States and the California-Oregon Power Company the question arises whether the government would have the right to divert water from Upper Klamath Lake for any purpose other than irrigation without agreement by the Company. In other words, if the government wished to use some of this water for flooding an area to conserve water fowl it would likely be contested by the California-Oregon Power Company.

You speak of this contract of February 24, 1917, but do not mention the contract of June 26, 1930. I have not seen either of these contracts. Does the latter strengthen the provision against the use of Upper Klamath Lake waters except for irrigation purposes?

When I was in the Klamath country in June I was surprised to find the gate in the dyke of the Klamath River at Ady open and the water flooding over the lands to the south. This is the first time I had seen these lands flooded since the water was taken off years ago. As the peat bed was on fire, the water may have been let in principally to extinguish this.

Very truly yours,

WHP:PF

July 2, 1934

*Klamath
file*

Mr. Elwood Mead, Commissioner
Department of the Interior
Bureau of Reclamation
Washington, D.C.

Dear Mr. Mead:

On May 3rd, I received a letter from you in reply to one I wrote April 24th asking some questions about the Klamath project. You said that you didn't have the information in the files of the Washington office but would get it from the Superintendent of the Klamath project.

Will you kindly let me know whether he has given you a report on the matter.

Very truly yours,

WLF:pf

August 20, 1934

Mr. Elwood Mead
Commissioner of Reclamation
Washington, D. C.

Dear Mr. Mead:

I should like to get some information regarding the cost concerning the Klamath irrigation district. What amount of money did the government expend and what was the acreage brought under cultivation? What was the amount assessed per acre in this district to pay for the dams, ditches, etc? What is the total amount still owing to the Government?

I understand the Tule Lake Project has been carried on as a division under the Klamath Drainage District. What is the total assessment against this District for costs, and how much of the amount has been paid?

One of the men who has settled on the Tule Lake division said there was an assessment of \$90.00 per acre against this property to pay the costs of canals, etc. He said that an excessive cost had been placed against the Tule Lake properties to relieve the Klamath Irrigation District. He felt the Klamath District should carry more of the load.

Should appreciate such information as you can give me.

Sincerely yours,

WLF:PF

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF BIOLOGICAL SURVEY
WASHINGTON, D. C.

ADDRESS REPLY TO
CHIEF, BUREAU OF BIOLOGICAL SURVEY
AND REFER TO

September 4, 1934.

Mr. William L. Finley,
Route 10,
Portland, Oregon.

Dear Mr. Finley:

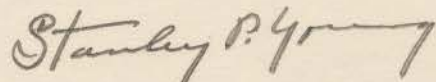
This is in reference to your letter of July 30 to Mr. Darling, who will not return until some time later this week, asking for copies of two contracts between the Bureau of Reclamation and the California-Oregon Power Company, dated February 24, 1917, and June 23, 1930.

We have succeeded in obtaining copies of these contracts and they are enclosed.

Just what bearing they may have on the problem or project you may have in mind, it is difficult for us to determine. But undoubtedly you will be able to work out some satisfactory answer to these matters.

Of course it is always true that the United States may condemn property, whatever be its nature, except money, for the public purposes of the Government. As a matter of course, compensation must be paid in any such condemnation.

Very sincerely yours,



Stanley P. Young,
In Charge, Division of
Game Management.

Incl. 24529

September 5, 1934

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?ered detetof ed of are abid hat gainilook areas
to areas esset essel colvie8 nottamised ent does Why
Mr. H. Woodhead, Director, Reclamation Service, Washington, D. C.
?ab Commissioners of Reclamation
Washington, D. C.

-con- I cannot see why one department of the government con-
Dear Mr. Woodhead: I am writing you with the use of land and water. I have
thoughtless of resources in charge of another department.

Many thanks for your letter of August
29 and 30, giving me the information as to the costs
of the Klamath Project and the construction of the
Tule Lake division.

I have been very much surprised at what seems to me the
unnecessary destruction of bird life on reclamation
projects in southern Oregon and northern California.
Of course, you are familiar with the results of drying
up Lower Klamath Lake. Mr. Nelson had this up with
you years ago when he was Chief of the Biological Sur-
vey. But that is past history.

Destruction of water fowl nesting areas has been almost
as great at Clear Lake. I realize this and other areas
were set aside originally as reclamation projects. How-
ever, they were also set aside by Executive Proclamation
as wild fowl refuges. I understand you have the right
to draw nearly all of the water out of Clear Lake, re-
ducing it to a comparatively small area, and greatly
lessening its value from the wild fowl standpoint. The
farmers, of course, demand the last drop and would drain
it dry if possible.

The point that I cannot understand is why the Reclama-
tion Service then leases the land around the border of
the lake within a federal wild bird reservation to
stockmen, permitting them to run sheep through colonies
of wild birds, tramping the nests and killing the young.
The sagehens have nearly vanished on this refuge. The
grass and plant life around the border where ducks and
geese nested in abundance have been destroyed.

The Reclamation Service has gained a few thousand dollars
in rentals, but I feel that this does not pay for the
damage to bird life. A natural resource belonging to
the public has been lost.

Why has the Reclamation Service adopted the same policy
at Tule Lake and the Upper Klamath where the President

September 5, 1934

of the United States has set aside a comparatively small area claiming that birds are to be protected here? Why does the Reclamation Service lease these areas to stockmen, destroying the natural cover which is most essential for breeding and feeding areas for the birds?

Washington, D. C.
I cannot see why one department of the government concerned with the uses of land and water should utterly thoughtless of resources in charge of another department. Many thanks for your letter of August 29 and 30, giving me the information as to the costs of the Klamath project, and the construction of the Tule Lake division.

I have been very much surprised at what seems to me the unnecessary destruction of bird life on reclamation projects in southern Oregon and northern California. Of course, you are familiar with the results of drying up Lower Klamath Lake. Mr. Nelson had this up with you years ago when he was Chief of the Biological Survey. But that is past history.

Destruction of water fowl nesting areas has been almost as great at Clear Lake. I realize this and other areas were set aside originally as reclamation projects. However, they were also set aside by Executive Reclamation as wild fowl refuges. I understand you have the right to draw nearly all of the water out of Clear Lake, reducing it to a comparatively small area, and greatly lessening its value from the wild fowl standpoint. The farmers, of course, demand the fast drop and would drain it dry if possible.

The point that I cannot understand is why the Reclamation Service then leases the land around the border of the lake within a federal wild bird reservation to stockmen, permitting them to run sheep through colonies of wild birds, tramping the nests and killing the young. The sagehens have nearly vanished on this refuge. The grass and plant life around the border where ducks and geese nested in abundance have been destroyed.

The Reclamation Service has gained a few thousand dollars in rentals, but I feel that this does not pay for the damage to bird life. A natural resource belonging to the public has been lost.

Why has the Reclamation Service adopted the same policy at Tule Lake and the Upper Klamath where the President

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
WASHINGTON

OFFICE OF THE COMMISSIONER

AUG 29 1934

Mr. William L. Finley,
Route 10,
Portland, Oregon.

My dear Mr. Finley:

Supplementing my letter to you of August 6, you are advised that a report has now been received from the Superintendent of the Klamath project, as follows:

"Referring to paragraph 1 of Mr. Finley's letter, will state that the Klamath Drainage District is entirely within the State of Oregon, the Oregon-California boundary line being the south boundary of the drainage district. The district contains about 27,000 acres of which about 7,000 are government lands and the remaining 20,000 acres are privately owned.

"The contract of June 25, 1930 mentioned in paragraph 3 of Mr. Finley's letter is evidently intended to refer to contract of June 23, 1930 between the United States and The California Oregon Power Company. This contract is for the lease of a portion of the so-called 'McCormick Site' near Keno and is not connected with the contract of February 24, 1917 providing for the regulation of Upper Klamath Lake.

"The water passing through the gates at Ady was irrigation water used by the Klamath Drainage District for the irrigation of lands within the district boundaries."

Very truly yours,

Elwood Mead
Commissioner.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
WASHINGTON

OFFICE OF THE COMMISSIONER

AUG 30 1934

Mr. William L. Finley,
Route 10,
Portland, Oregon.

My dear Mr. Finley:

Receipt is acknowledged of your letter of August 20, 1934, requesting information concerning the Klamath irrigation project.

The Government has expended \$6,266,645.47 for construction of the Klamath project. Adding the cost of operation and maintenance during construction and other items payable with construction and deducting construction revenues, the net amount repayable is \$6,181,487.54. The irrigable area of the project is 173,479.

The Klamath project is made up of several divisions and the construction charge rates per acre vary considerably due to special conditions affecting the various divisions.

The original division, the Main Division, was built in the early days during the period of low construction costs and as this division requires no storage, the cost of original construction is low. Original construction rates run from \$30 to \$45 per acre. However, it has been found necessary to do considerable supplemental construction work in the way of constructing drains, which, when completed, will bring the average cost per acre to approximately \$52 per acre.

Construction of the Tule Lake division has extended over a long period of years and is not yet complete. Extraordinary features of this development are a diversion canal extending from Lost River to Klamath River to carry off flood waters which would otherwise go down Lost River and inundate Tule Lake lands, and dikes in the lake bed for the purpose of holding waters left in the lake within certain limits. Two storage reservoirs in Langell Valley contribute in controlling flood waters. The estimated completed construction cost of \$88.35 per acre is considered reasonable considering the quality of the irrigable land in this division.

The major portion of the lands in the Tule Lake division were covered by public notice of September 29, 1922, opening the land to entry subject to a construction charge of \$90 per acre. However, this public notice was suspended on January 15, 1923, and no further filings were allowed. Public order of January 22, 1927, recalled and vacated public notice of September 29, 1922, and placed the land on a water rental basis. No construction charges are being paid by the entrymen on this division, only annual water rental charges. The 1927 order provides that the division will be operated on a water rental basis until its agricultural development has advanced sufficiently to permit of the lands being organized as an irrigation district, at which time a so-called joint liability contract will be required and the construction charge will be announced at \$88.35 per acre payable over a 40-year period.

There is no truth in the allegation that an excessive cost has been placed against the Tule Lake division to relieve the Klamath Irrigation District. About 7 per cent of the lands in the Tule Lake division are situated in the State of Oregon and are included in the Klamath Irrigation District. For these lands, the district must pay the same construction charge rate as is assessed against the lands of the division lying in the State of California.

There is no relation between the Klamath Drainage District and the Tule Lake division. The Klamath Drainage District was organized to reclaim marsh lands around the upper end of the Lower Klamath Lake which lies some distance west of Tule Lake.

Very truly yours,

Edward Mead

Commissioner.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
WASHINGTON

OFFICE OF THE COMMISSIONER

file
This answers previous letter
OCT -9 1934

Mr. William L. Finley,
Route 10,
Portland, Oregon.

My dear Mr. Finley:

I have received your letter of September 10 in regard to the use of the waters of Upper Klamath Lake to flood Federal lands to conserve water fowl. This Bureau, acting in pursuance of existing legislation, could not reflood Lower Klamath Lake for the sole purpose of protecting and propagating migratory bird life. The reason is that the Bureau's activities on the Klamath project are limited to reclaiming arid land of the United States, and only measures that are reasonably incidental to such reclamation activities may be taken.

It would certainly seem that Lower Klamath Lake may be reflooded for the benefit of migratory bird life if Congress and the States by statute consent thereto. The California Oregon Power Company would probably not object to the reflooding, if indeed it has any standing to object on account of the contract of June 23, 1930, which seems very doubtful.

Very truly yours,

M. A. Schurr
Acting Commissioner

REASON FOR GOVERNMENT OWNERSHIP

An important step by President Roosevelt during the past year was the establishment of the National Resources Board. The idea was to work out a national program for the development and use of land, water, and natural resources.

The natural resources of the country, including forests, ~~and~~ streams, and lakes, with the bird, mammal, and fish life that inhabit these areas, are widely spread from the Atlantic to the Pacific. The various problems affecting these resources cannot be worked out by private individuals or by the state.

The people in one state, for instance, may destroy the forested areas on the headwaters of streams. This causes a lack of control of the water supply with destructive floods in winter or spring, and the lack of water in summer when it is needed. For the good of all the people, therefore, the control of these resources in an established policy covering a long period of time is necessary. The forest crop, taking eighty to a hundred years to grow, is too slow for private control.

It has come to be almost a universal policy to use the rivers of the country as public sewers, spreading filth and disease from one section to areas lower down. This carelessness results in the extermination of fish, food supply for the people. It ^{prevents} ~~destroys~~ the waterways from being used for recreational purposes. This is both a state and a federal problem.

The destruction of feeding and breeding areas where wild life once thrived affects many parts of the country, and can only be handled by federal control.

AMERICAN NATURAL RESOURCES ASSOCIATION



One of the most important problems before the country today is the proper use and development of our outdoor resources.

In every subject to be considered, there is a necessary adjustment between the commercial uses of land and water resources, and the recreational value of these resources. *4 protection which takes*

In the conservation of waterfowl in the country, we have destroyed the resting, feeding, and nesting areas by draining too many ponds, swamps, and lakes. *as in place produced from agricultural land*

Much of this was done under land promotion schemes and resulted in producing land of poor agricultural value on which many people have settled. *land water levels made unsuitable for agriculture*

The problem is to get these people on more productive land and hold our remaining swamp and lake areas because they have values in producing fish, fur-bearing animals, and waterfowl.

The problems attendant upon storing up water for irrigation changes the conditions of the fish in the streams and the wild birds and mammals, but this is not detrimental if the proper adjustments are made.

The ~~the~~ salmon runs of the Pacific Coast rivers have great values from a commercial and food standpoint. Other fish in the streams have both recreational and food values.

Fishery resources are often destroyed by fish being led out into irrigation ditches to die in the fields. Mills, factories, and cities pollute our rivers, destroying the oxygen in the water, and thus kill the fish. The damming of rivers for power purposes are very destructive to the migratory fishes if adequate provision is not made for the mature fish to go up streams to spawn, and for the fingerlings to return to the ocean.

STATE GAME COMMISSION

Forested areas are valuable from the lumber standpoint, but proper re-forestation should be carried on. Much valuable timber is destroyed by careless fires.

The rapid development of good roads, enabling hunters and anglers to reach the wildest parts of the forests and the most remote streams.

THE STATE OF ALABAMA
BUREAU OF FOREST MANAGEMENT
OFFICE OF THE COMMISSIONER

W. B. BRYANT, Commissioner
J. M. BRYANT, Secretary
J. M. BRYANT, Treasurer
J. M. BRYANT, Auditor



W. B. BRYANT, Commissioner
J. M. BRYANT, Secretary
J. M. BRYANT, Treasurer
J. M. BRYANT, Auditor

ALABAMA GAME COMMISSION

October 13, 1934

Mr. F. E. Schmitt
Bureau of Reclamation
Department of the Interior
Washington, D. C.

Dear Mr. Schmitt:

I appeared at the meeting of your Committee in Portland when you had a hearing on Reclamation Projects. You will remember that I called your attention to the policy of the Reclamation Service in southern Oregon and northern California, which I consider very detrimental to our wildlife resources.

You asked me if I would submit my report in writing, so I am sending it enclosed.

I hope you will give this matter consideration, and if it meets with your approval recommend that some changes be made.

Sincerely yours,

WLF:EF

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
WASHINGTON

OFFICE OF THE COMMISSIONER

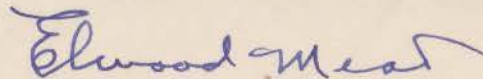
JAN -4 1935

Mr. William L. Finley,
Route 10, Portland, Oregon.

My dear Mr. Finley:

I have received your letter of December 27 relative to the administration of wild fowl sanctuaries on the Klamath project. It is often difficult to correlate human needs and wild life requirements, but it is the aim of the Bureau to do so wherever practicable. A copy of your letter and of this letter is being sent to Mr. Hayden at Klamath Falls.

Very truly yours,

A handwritten signature in blue ink, reading "Elwood Mead". The signature is written in a cursive style with a large initial "E".

Commissioner.

G. G. BROWN
CLERK

STATE OF OREGON
OFFICE OF THE STATE LAND BOARD
710 FIRST NATIONAL BANK BUILDING
SALEM

IN REFERRING TO THIS COMMUNICATION
IT IS IMPORTANT THAT YOU MENTION

FILE NO.

July 12, 1935.

Wm. L. Finley,
Route 10,
Portland, Oregon.

Dear Mr. Finley:

Answering your inquiry, the following amounts have
been paid in the Malheur Lake case.

| | |
|---|------------------|
| Telephone, - - - - - | \$ 15.92 |
| Engineers, - - - - - | 183.55 |
| Abstracts, - - - - - | 180.00 |
| Southern Pacific, - - - - - | 150.78 |
| Stenographer & Court Reporting, - - - - - | 995.35 |
| Printing, - - - - - | 1397.19 |
| Expenses, L. A. Liljeqvist, - - - - - | 1396.11 |
| Salary, L. A. Liljeqvist, - - - - - | 8100.00 |
| | <u>12,418.90</u> |

Of the \$18000.00 appropriated, Balance - - - - 5,581.10

Unpaid claims as follows:

Fee and disbursements of Garrett W.
McEnerney, Special Master, as
fixed and allowed by order of
the U.S. Supreme Court,

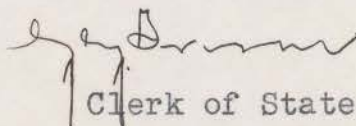
| | |
|---------------------|------------------|
| Fee - - - - - | \$15,000.00 |
| Disbursements - - - | <u>6,654.56</u> |
| | <u>21,654.56</u> |

One-half to be paid by State of Oregon
By order of U.S. Supreme Court,

\$10,827.28

Deficit, - - - - - 5,246.18

Very truly yours,


Clerk of State Land Board.

GGB:W

AMERICAN GAME ASSOCIATION

MEMORANDUM

TO Mr. Finley

DATE July 3, 1935

FROM Miss Quee

In response to your request of sometime ago I am returning herewith the copy of your paper presented at the 21st American Game Conference. Sorry to have been so long getting this to you but the manuscripts have just been returned by the printer.

Reclamation Service

(Reclamation Service in its relations to waterfowl by William D. Finley Portland Oregon)

The past and present policy of the Reclamation Service of the Department of the Interior in southern Oregon and northern California has been very destructive to wild life resources.

A part of this destruction comes from drying up swamps and lakes, the ancestral resting, breeding, and feeding areas of ducks, geese, and other migratory water fowl. This may be justified on the basis of developing more important uses of land and water for the public benefit.

UNNECESSARY DESTRUCTION SEEN

On the other hand, acts not essential to irrigation and reclamation, that show unnecessary destruction of one public resource in developing another, cannot be justified.

The reclamation projects established in different western states created reservoirs or large bodies of water, some combined with swamp areas, which were recognized as advantageous sanctuaries for water fowl. In certain cases, all or parts of these areas have been created by Special Executive Proclamations as wild bird reservations. The Presidential orders establishing these sanctuaries provide against the destroying of nests and eggs, or hunting or disturbing birds.

The Reclamation Service has priority rights in the development of certain lands and waters in the above mentioned districts. The Biological Survey of the Department of Agriculture has secondary rights in protecting and developing the wild life resources on the lands and waters of this district.

LACK OF COORDINATING WORK

Our complaint is that there has been and at present exists a lack of co-ordinating the work of these two federal departments both spending public funds. The acts of the Bureau of Reclamation

Waterfowl discussion

Please return to William D. Finley, Nat. Reclamation Production Service, 1915 Broadway, New York.

have nullified the services of the Biological Survey.

The result has been a very great destruction of water fowl that could have been prevented.

~~Therefore, we feel that the rights of the Biological Survey in preserving wild fowl, although secondary, should be recognised.~~

A number of cases may be presented where the Reclamation Service is destroying bird life on ~~a~~ federal wild fowl reservations, as a result of adopting a policy which is not essential to successful irrigation and reclamation. ~~This policy has been~~ ^{by} the leasing of these federal reservations ^{areas} where birds nest and feed to livestock owners for grazing purposes.

1/10 Clear Lake may be given as an example. It lies in Modoc County, northern California, and was created a bird sanctuary by Executive Order, April 11, 1911. Originally it was a body of water about eight by ten miles. All around the border of the lake was natural plant life where different species of ducks and many Canada geese were nesting. The sagebrush areas around the border were the breeding places of many sage hens. The value of this sanctuary lay in the number and variety of bird life, and its distance from any settled area.

GRAZING DESTROYS BIRDS *Hubbard*

The waters of the lake have now been lowered to the limit, leaving a large part of the old lake bed uncovered. Of these uncovered lands, the Reclamation Service has signed four leases turning over 14,120 acres of the reservation to stockmen. The average price received was about twenty-five cents per acre per year. ~~These leases started in 1931.~~ At first the flocks of sheep not only grazed off the natural vegetation, but tramped through colonies of birds, destroying the nestlings.

Upon complaint of the Biological Survey, any leases now authorized by the Bureau of Reclamation forbid grazing between April 1 and July 1. While this may prevent tramping out of the nests of birds, it destroys all of the natural cover necessary for bird life.

Start
A few months ago I ^{WROTE} ~~made~~ to Mr. Elwood Mead, Commissioner of Reclamation, about this destruction of bird life. His response was a report written by B. E. Hayden, Chief Engineer in charge of the Project. His claim is that formerly range stock had free access to the grass and weeds that grew along the water's edge. Therefore, it *Clear Lake* was leased to stockmen in return for cash revenues as follows: From 1931 to 1934, \$9552.57 were received by the Reclamation Service and were applied to the construction charges, or costs of the districts affected.


Mr. Hayden's report states that "the Reclamation Bureau might well entertain some reasonable proposition from the Biological Survey where the Survey would compensate the settlers for the agreed loss of revenue, *if they were to take the area over* and the Survey then be permitted to fence the entire lake or any portion thereof for the complete exclusion of stock, due provision being made for stock lanes to accomodate range cattle and sheep."

The Reclamation Service in conjunction with the Biological Survey has full power and authority to keep range stock off this reservation as a protection to bird life.

JUST ANOTHER GOVERNMENT ABSURDITY
The suggestion that one department of the government pay another department of the government for the rights to conserve a natural resource is an absurdity. *subhead* (It shows a lack of co-ordinating the work of two bureaus, both dealing with important public resources.) Why should the Biological Survey pay the settlers on the Clear Lake Project for the privilege of preserving bird life on federal lands

set aside for this purpose by the President of the United States?

The Bureau of Reclamation could greatly assist in wild fowl protection and restoration by cancelling its leases and stopping the grazing of livestock on federal bird reservations. The sum of money received for grazing rights on sanctuaries does not compensate for the amount of destruction. Leases to stockmen are not a service essential to irrigation or reclamation. Reclamation officials in the Klamath district have promoted the uses of land and water, but have been unmindful of the protection and development of wild life resources.



DEPARTMENT OF THE INTERIOR
COMMITTEE ON FEDERAL RECLAMATION POLICY

JOHN W. HAW
F. E. SCHMITT

Room 6413 New Post Office Building
Washington, D.C.
October 30, 1934

Sept 28 return *File*
Reclamation
file

Mr. William L. Finley,
Route 10,
Portland, Oregon.

My dear Mr. Finley:

This is to acknowledge with appreciation and interest yours of October 13 transmitting a memorandum on questions of wild life protection on Klamath project. The statement appears to be clear and well ordered and we will make it our duty to bring the subject to Doctor Mead's attention. I know that he is interested in having Reclamation fit in with all associated activities and proper demands, and that he has every wish not to cause the activities of the Bureau to be harmful to the interests in which you are here concerned.

Sincerely yours,

F. E. Schmitt

F. E. Schmitt

Reclamation at Klamath *The Poor Duck*

RECLAMATION IN THE KLAMATH DISTRICT *1st Report Duck*
AND ITS EFFECT ON WATER FOWL *Darby*

by

William L. Finley

During the late 90's market hunters carried on a prosperous business along the Oregon-California boundary at Lower Klamath and Tule Lakes. The records of the Game Transfer Company in San Francisco showed that one hundred and twenty tons of ducks were shipped to market from this region in one season. The passage of state laws in Oregon and California stopped this traffic.

Today the records show that the Bureau of Reclamation of the Department of the Interior have killed far more water fowl than all of the market hunters combined because they have destroyed the vast breeding, feeding and resting areas.

Without doubt the Reclamation Service has greatly increased the productive agricultural land in this district, but it is a serious question as to whether the crops will ever pay the big costs of dams and ditches. Some projects in the district have been destructive when we consider the best public use of land, water and other natural resources.

A study of Reclamation work as carried on by the Project Superintendent of the Klamath district shows the following:

1- This Department of the government has dried up swamps and lakes, corraling the entire water supply with the idea that all land and water uses are for one purpose only.

2- The wild life resources belonging to the people as a whole have not been protected, but have been destroyed.

3- There has been an utter lack of coordinating the activities of the Reclamation Service of the Department of the Interior and the Biological Survey of the Department of Agriculture. The former has been in dominant control, destroying resources entrusted to the protection of the latter.

out

4- With the prestige of the government behind it, this Department has played the double role of land shark and land lord. Some land is sold outright to farmers at exorbitant prices. Other areas are leased to farmers at low prices, creating an unfair competition in crop production.

Let us take up various projects in the Klamath district and see how these have been handled by the Reclamation Service. Have they been managed to develop the full use of land, water and

other natural resources, or has it been a commercialized regime of selfish land engineers?

LOWER KLAMATH LAKE

Under the mistaken idea that Lower Klamath Lake should be dried up and made into agricultural land, the state legislatures of Oregon and California deeded this area to the federal government. Approximately \$283,000. was spent by the government on the Lower Klamath Lake Project. Careful examinations were made of the soil in and around the bed of the lake by the Department of Agriculture. Dr. C. F. Marbut, Soil Expert, reported that all evidence pointed to the conclusion that successful agriculture could not be carried on within the area of deep tule ~~peat~~ ^{PEAT} or within the area formerly covered by water.

August 8, 1908, President Theodore Roosevelt by Special Executive Proclamation created Lower Klamath Lake into a wild bird reservation. This, of course, was subject to its use by the Reclamation Service. With the complete knowledge in hand that this area was not good for agricultural land, but apparently with the sole idea of getting back the money expended on this useless project, the Reclamation Service sold out to the Klamath Drainage District which was a land promotion scheme. This corporation has no connection with the Klamath Irrigation Project sustained by the waters of Upper Klamath Lake.

The water of Klamath River was shut off from flowing into Lower Klamath Lake and the Lake dried up by evaporation. This also dried up White Lake an area to the east of Lower Klamath.

Lower Klamath Lake Reservation contained about 85,000 acres of shallow water and vast tule marshes and was the ancestral breeding, feeding, and resting place of myriads of ducks, geese, and other water fowl. The federal government made a serious blunder in destroying one of the greatest wild fowl refuges in the United States and turning over a vast section of very poor or useless agricultural soil to ~~unsuspecting~~ farmers. The federal government should right this wrong.

Another serious blunder ~~that may be laid to the Reclamation Service~~ in this district was tying up the water rights of Klamath River and Upper Klamath Lake in two contracts with the California-Oregon Power Company. Although the Reclamation Service admits that there has never been a shortage of water in ^{taken the stand} Upper Klamath Lake even in the driest years, yet none of this water could be used to flood an area to conserve water fowl. It can only be used for irrigation and power development.

Years ago George Chamberlain, Governor of Oregon, said

the Oregon Legislature would never have passed the necessary acts giving the government control of this water if it had known the Department of the Interior would turn the power development over to private parties.

Upper Klamath Lake.

A portion of Upper Klamath Lake was set aside as a wild fowl refuge and placed under the supervision of the Biological Survey of the Department of Agriculture. Since our water fowl are protected by state and federal law, and we are bound by a treaty with Canada to conserve migratory birds, this area should be a sanctuary where birds could at least breed undisturbed.

It is taken for granted that under the law the duties of the Reclamation Service pertain, engineering, care of dykes and dams, and the details of furnishing water to various lands. Why should this Department act as landlord in leasing out to stockmen areas within a federal wild bird reservation when this destroys water fowl and is a direct violation of the rules and regulations of the Biological Survey of the Department of Agriculture? 100g

For several years past Mr. H. M. Worcester, Reservation Protector, for the Biological Survey, has repeatedly reported not only the lack of protecting water fowl, but the unnecessary destruction of bird life resulting ^{FROM} the tactics of the Reclamation Service.

The Upper Klamath Refuge embraces open water, tule patches, and about 5520 acres of land and marsh which is an ideal nesting area. All of this breeding ground has been leased out to stockmen with no restriction as to the number of sheep and cattle ^{that} can graze the area. While provision was made in the leases that grazing was not permitted during the nesting season of birds, yet destroying the cover of natural grasses and plants destroys the food and nesting places of birds.

The sum of money received by the government for grazing on a wild fowl sanctuary does not compensate for the amount of the destruction.

Clear Lake.

This was originally a large body of water in Modoc County, northern California. The Reclamation Service built a dam across Lost River at the outlet of the lake.

In 1912 when I investigated this federal refuge, the water was part way up on the dam, the lake was about eight miles across east and west, and about ten miles stretching north and south. In the tule patches near the mouth of Willow Creek were

large numbers of western grebe and Forster's terns nesting. On the islands in the lake were colonies of gulls, pelicans, cormorants, etc. All around the border of the lake was natural plant life where different species of ducks and many Canada geese were nesting. The sage brush areas around the border were abundant breeding places for sage hens. The value of this sanctuary lay in the number and variety of bird life and its distance from any settled area.

out From the beginning ~~the control of~~ this area ^{*has been shown*} ~~governed~~ ^{*has been controlled*} by the Reclamation Service, ~~showed~~ ^{*detached back from the dam*} no interest in bird life. The course of years has piled up an appalling destruction. Partly on account of dry seasons the water in the lake bed receded. As it grew less the Reclamation Service built a ditch to draw off more water. This ditch now extends several miles from the dam to meet the remaining water in the lake. The lake has been lowered until at present it is only a small portion of the full lake bed in 1912.

If the continued lowering of this lake came from the demands of farmers for water, the demands are now much greater as the supply is about exhausted. The water level has been lowered too much and the condition of the country affected. Since there is no surplus, why drain the reservoir to the danger point?

This is only a part of the story of Clear Lake Reservation. As the waters receded within the border of the refuge a variety of vegetation covered the land furnishing abundant nesting and feeding areas for ducks, geese, and other birds. Then the Reclamation Service began leasing these areas to stockmen.

wanderers in charge
Mr. Worcester's reports give the details of four leases, some running for several years, covering 14,120 acres of land on the best parts of Clear Lake Reservation. This land is leased to cattle and sheep men at an average price of twenty-two cents per acre per year.

Grazing bands of sheep have not only eaten off the natural vegetation on this wild fowl sanctuary, but they have tramped out the nests of birds. They have tramped through colonies of terns and gulls, killing the young birds. During the past season one colony of gulls have nested on a little knoll six or eight miles away from any water. Having no protection here, it looks as if all the gulls in this area are likely to be destroyed.

Roaming bands of sheep have destroyed large numbers of sage hens. In one place where Worcester counted approximately a thousand sage hens, after the area had been grazed by sheep he surveyed the same region and counted fifteen birds.

While these depredations have been going on, the Bio-

logical Survey has been spending public funds employing wardens to protect bird life on federal refuges. They have constructed fences across points of land in an effort to keep cattle and sheep from destroying the few remaining birds. The photographs that I took on Clear Lake Refuge show natural vegetation on one side of the fence as a protection to birds. The other side of the fence is a barren waste with scarcely a blade of grass.

During past summer
(At the present moment) the Biological Survey has some fifteen men ~~that~~ work on Clear Lake Reservation constructing eight miles of fence in an effort to save the bird life. Up to date \$2750.00 of federal funds have been allotted for this purpose.

Barry of to date
Clear Lake Reservation was created by the President of the United States to preserve bird life. A man may be arrested and fined for disturbing or destroying wild birds, their nests and eggs, under the rules prescribed by the Secretary of Agriculture. Yet the Reclamation Service can thwart the proclamation of the President by leasing a wild life sanctuary at twenty-two cents per acre and destroy untold numbers of birds.

one dept. of gov. the R.S. has priority
This is a clear case of one department of the government nullifying the efforts of another department whose sworn duty it is to protect these wild life resources.

Tule Lake.

When I cruised across Tule Lake in 1908, it was a body of water about twelve or fifteen miles long and ten or eleven miles wide. It was supplied by the water of Lost River entering from the North. ~~It will be remembered that Lost River was the outlet of Clear Lake.~~ The west side and the whole northern border was a vast tule marsh and a natural wild fowl nursery.

This area was taken over by the Reclamation Service and is now handled ^{as} a division of the Klamath Project. (This refers to Upper Klamath Lake, not Lower Klamath.) The ~~whole~~ northern part of this area is good agricultural land, irrigated from the Upper Klamath, and has been taken up by settlers in comparatively small tracts of about fifty or sixty acres. The southern part, about 65,000 acres, was designated as the sump area and is held by the Reclamation Service. This is the lowest level and is needed as a drain to let the water run off the northern part after irrigating.

Approximately 10,000 acres of this sump area lying in Siskiyou County, California, was set aside by Presidential Proclamation and is known as Tule Lake Wild Life Refuge.

out
(The policy of the Superintendent of the Reclamation Service of the Klamath District is clearly shown in the ~~handling~~ ^{handling})

of the public lands in the Tule Lake area. This is designated as the Tule Lake Division of the Klamath Irrigation Project. It receives water through the main canals originally built for the Klamath Project. While the cost of these main canals was originally assessed against the Klamath Irrigation Project, when the Tule Lake Division was added these lands took up a good part of the assessment.

cont The settlers on the northern part of the Tule Lake area are carrying government costs of ~~the~~ dams, dykes, etc of \$90.00 per acre. They also carry the cost of furnishing water for irrigation, which, as I recall, runs about \$1.50 per acre per year. With expenses of improvements and farming, these homesteaders are carrying a load that is not likely to be lifted by the products they produce on the land.

The balance of the land in the sump area on the east, south, and west sides of the Refuge is held by the Reclamation Service and as landlord it leases this land to farmers under five year periods at an average of about \$2.00 per acre per year. The lessee constructs and maintains the necessary dykes to water his land, but he can pump his irrigation water from the sump without charge. These leased lands produce similar crops of equal value to those lands owned by the settlers on the North who are under the burden of a big federal debt.

*cont
share?* The Reclamation Service has created a bitter conflict between the residents on the North who own their land by assuming a heavy federal debt, and the lessees on the South. The settlers on the northern half feel they have shouldered (an excessive) cost for the main canals of the Klamath Drainage District. The lessees on the South are carrying no such load. The Reclamation Service has therefore created an unfair competition in crop production.

If the Department of the Interior wants to take farm lands out of production, here is the place to do it. Let the Reclamation Service cease leasing its government-owned land to farmers at a low rental because these compete unfairly with other farmers carrying a huge load of debt incurred by the Reclamation Service.

out There are actual cases, I was told, of farmers in the Tule Lake Division who are paid by the government not to produce certain crops. On the other hand, the government is leasing its own land a mile or so away at a low price so farmers can produce these same crops.

This is a conflict known by residents of northern California and should be corrected because of the bitterness aroused against the government by such inconsistency. Whether this policy originated with the Project Superintendent at Klamath Falls, or whether it is a general policy of the Reclamation Service, I do not know.

change

The Tule Lake Refuge is not large enough for the purpose for which it was created. During the migrating season the ducks and geese have to feed on the surrounding lands. Each year Mr. Worcester gets many complaints from the lessees and the government has to purchase ammunition to drive ducks and geese from their fields. The whole sump area should be a wild life refuge to take the place of other swamp and lake areas destroyed by the Reclamation Service. The federal government already owns this land. It should be taken out of cultivation in fairness to farmers on the northern half who are trying to make a living. Why should the government act as landlord and lease these lands when they are of (more) value to the public in preserving our wild life resources?

Let us look at the present conditions at Tule Lake Refuge. There is quite a large open body of water with many patches of tule or club rushes, especially around the border. These floating tule islands so-called, are good nesting places for certain varieties of water fowl, but others nest on land in natural vegetation near the water. A section of land along the northern border of the Refuge is above the water level and is a very valuable breeding place for ducks, geese, and wading birds. It had a good growth of grass and plant life.

Even though the Reclamation Service is leasing lands on three sides of the Refuge they began in 1933 to lease this land within the Refuge to stockmen. For a rental of \$250.00 stock were turned in on the Refuge. The meadow land was cut up and tramped and the natural food of ducks and geese destroyed. This small amount of revenue in no way compensated for the damage done to bird life.

use

In addition to the above damage, the Reclamation Service leased a small acreage of land lying between two channels of Lost River adjoining the Refuge on the North. This was swampy and should have been kept as a nesting ground. This, with a tract of thirty some acres, was leased for a period of five years to a stockman at a yearly rental of \$180.00.

An island of twelve acres in Lost River was a very favorable nesting area for geese and ducks. It was especially desirable during the winter season on account of warm springs above that kept the river open and free from ice when other water areas freeze up. Thousands of ducks and geese frequent this area to feed and rest.

to water fowl

Regardless of its value, the Reclamation Service leased it for \$25.00 to a man who turned in hogs and goats to clean off the vegetation and cover. The lessee in turn has contacted sportsmen at Klamath Falls and made a proposition to re-lease this area as a hunting club for \$100.00. *This fact helps to the fact, is useful for birds*

This lease like others entered into by the Reclamation Service, should be cancelled. Also leases for grazing on wild fowl reservations should be annulled.

In conclusion, I feel that the above facts demand a full and careful government investigation of the Superintendent of the Reclamation Service at Klamath Falls. Settlers who have complaints have a right to be heard. Under present conditions their grievances are not likely to reach the Secretary of the Interior. They are likely to be careful lest they incur the displeasure of Reclamation officials in this district who are in the position of a landlord holding heavy mortgages and many leases.

In the second place, the Superintendent of the Reclamation Service in this district has dominated and prevented the broader use of land, water, and natural resources. With an utter lack of vision to see the picture as a whole, he has nullified the services of another Department of the Federal Government which was also created to serve the people of this country.

Mr. Schmidt - Englewood
John W. Hall, Harp

In conclusion, I feel that the above facts demand a full and careful government investigation of the Superintendent of the Reclamation Service at Klamath Falls. Settlers who have complaints have a right to be heard. Under present conditions their grievances are not likely to reach the Secretary of the Interior. They are likely to be careful lest they incur the displeasure of Reclamation officials in this district who are in the position of a landlord holding heavy mortgages and many leases.

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W.L.F.

Under NIRA I have received todate \$2750.00 to construct 8 mile of fence with at Clear Lake. I am starting to construct this Monday. I belive that I have covered all questions you requested, will write again in a few days.

In haste.

Hugh.

Graze.
Clear, Klamath,
Tule Lake
Refuge's.

Tule Lake Wild Life Refuge.
Box 50. Merrill, Ore.
Aug. 3, 1934

1600
1025
180
335
14120
5140.0
28240
31600
1220

Chief, U. S. Biological Survey,
Washington, D. C.

Dear Sir:-

The following covers my interview with Mr. B. E. Hayden, Supt., Reclamation Bureau of Klamath Falls, Ore., as requested in your wire of July 27, 1934.

Clear Lake Refuge. Total fees collected annually covering all lands leased in the Refuge amount to \$3140.00 for 14,120 acres and is made up of the following.

| Lessee. | No. Acres. | Fee. | Expires. |
|--------------|------------------|-----------|-----------------|
| Dan Sullivan | 5280 (recede) | \$1600.00 | Dec. 31, 1934 |
| Dan Sullivan | 4840 (Pennisula) | \$1025.00 | Dec. 31, 1936 ✓ |
| Ivan Kilgore | 720 | \$180.00 | Dec. 31, 1935 ✓ |
| Con O'Keefe | 3280 | \$335.00 | Dec. 31, 1937 ✓ |

14120

The recede lease held by Dan Sullivan covers the lands surrounding the bird islands and vicinity. The water receded from this land the first time this year. It was all seeded to rye and oats which is now being cut and stacked to supply food to many bands of sheep this winter. The yield was enormous and Mr. Sullivan told me yesterday that he would have when finished close to 10,000 ton of hay. The Pennisula lease is made up of shore line around the Pennisula and the high rock and grassy lands adjoining, this is all within the old fence and the new fence now being constructed. The recede lease is not all inside of the new fence running from the North side of Pennisula to the canal but excludes very little, approximately 600 acres lying outside. The Ivan Kilgore lease is high sandy fertile soil and has been sown to rye for 4 years. This lease is outside and to the North of the fence line now being constructed. The Con O'Keefe lease is on the West side of the lake.

Tule Lake Refuge. I was advised that the Tule Lake Refuge will be leased this fall if water levels permit. The Fugate lease contains 60 acres, annual fee \$181.00 and lies in the form of a long, narrow island between the two channels of Lost River from a point where the River enters the present Refuge, North past Lost River bridge to the pump house. This lease expires Dec. 31, 1942.

Graze.
Clear, Klamath,
Tule Lake
Refuge's.

With reference to the cost per acre for the grain lands surrounding the Refuge which is leased by the Reclamation Service for 5 year periods I found that the high poor land leased for .12½ cents low to \$4.55 high, the average however is around \$2.00 per acre. The lessee must construct and maintain the necessary dikes to protect and water his lands. No charge is made for irrigation water which comes from the Tule Lake Sump.

Upper Klamath Refuge. All of this Refuge has been under lease for several years, with the exception of the Bay in front of the Rocky Point Resort. Total fees collected annually, lessee and expiration date follows.

| Lessee. | No. acres. | Fee. | Expires. |
|----------------|------------|---------------|---------------|
| A. E. Wampler | 1180 | \$150.90 | Dec. 31, 1936 |
| Jerry O'Conner | 4340 | Per acre .62½ | Dec. 31, 1937 |

No additional land on the Refuge available for lease. No restriction in regards to the number of sheep and cattle that can be grazed under all these leases has been specified.

Lower Klamath Lake. Mr. Zukerman owner of the large tract near the Straits was irrigating according to Mr. Hayden, this was mentioned by me in my weekly report. The ranch foreman advised me without knowing who I was that they flooded to put out a peat fire.

Small Island near Olene, Oregon in Lost River. This island contains approximately 12 acres, it is leased by Frank Gabriel at \$25.00 annually from the Reclamation Bureau. A short time ago Mr. Gabriel contacted a Klamath Falls Sportsman and made a proposition to lease this for \$100.00 as a hunting club. This island is very desirable for that purpose on account of the warm springs in the River above the island which keep the river open and free from ice at the time of the year when the balance of the water area in this district freezes up. At this time many thousands of ducks and geese frequent this warm water to feed and rest.

Accompanying this report please find set of pictures, properly identified also some suggestions from my personal observations regarding the above leases.

Very truly yours,

H. M. Worcester

H. M. Worcester.
Reservation Protector.

C.C.
William L. Finley

Graze.
1934

Tule Lake Wild Life Refuge.
Box 50. Merrill, Ore.
Aug. 4, 1934

Chief, U. S. Biological Survey,
Washington, D. C.

Dear Sir:-

The following are my suggestions for canceling and returning to the birds the lands under lease on the Clear Lake Refuge.

The lease of 5280 acres cost Mr. Sullivan less than .22 cents per acre, on this land he raised an enormous crop of hay with which to feed not only his own sheep but many other bands this coming winter. The homesteader who in most cases is proving up in this vicinity in order to get the Federal loan, also the Farmer in this district raises hay and furnishes pasture each winter to these sheepmen and in a great many cases is the only profit they make from their ranch. By reason of the Reclamation leasing the above they have deprived these needy farmers of their income. This is in-direct competition with the plan that our President is trying to put forth for the farmers benefit. On the other hand if this land was allowed to lie dormant or even planted to a crop each year for the birds to harvest, we would be protecting, making a nesting area and also relieving the complaint which we yearly receive that the birds are doing a damage. With reference to the Penninsula lease it should be canceled at once in order to give the nesting birds, migratory as well as upland one place in this entire district where they can nest unmolested. That they will nest here if protected was demonstrated this year on the area protected by the temporary fence at the Pelican colony on this Penninsula. The grass grew tall and remained green long after the area outside the fence was bare of vegetation. In this fenced area of less than 50 acres I personally counted 9 Canada goose nests and I believe more were there which I could not locate. One goose had her nest only 3 feet from the nearest Pelican nest. Also found 1 mallard, 1 Cinnamon teal and 1 Sprig nest. 1 short eared Owl and 7 Willet nests. I am quite sure these birds nested there on account of the condition of vegetation, etc. On my trip to the Penninsula yesterday I counted 3 antelope very close to the car, I was also informed that 7 had been observed there 3 days ago. The Reclamation receives from this 4840 acres less than .22 cents per acre. The Ivan Kilgore lease lies on high ground and at considerable distance from the Penninsula. This lease and the one held by Con O'Keefe I believe should not be canceled. I would also suggest that that part of the Sullivan lease outside of the fence be not canceled. But in making a new lease they should contain

Graze.

2
How it's
money go.

a provision that nesting bird colonies will not be molested. For they might shift their nesting colonies on to this leased land in the event of high water, etc. My only reason for suggesting the continuance of all leases outside the fenced area on and near the Peninsula is from the fact that if we take all the small revenue derived from this source away from the Reclamation the irrigation district located in Langell Valley would complain regarding this loss as it would raise their bonded indebtedness and deprive them of this revenue.

drawn
but the
away

With reference to Tule Lake Refuge, it is terrible to think that for the small sum of \$250.00 which is the amount derived from the lease last year that any Government Department would allow the only resting and feeding area where birds have protection to be destroyed and I would recommend that the Reclamation Bureau be forbidden from allowing any grazing to interfere with the bird life thereon. This is also true of the Fugate lease, where 60 acres of the finest duck and goose nesting area has been plowed up. In the bid for this lease it is specified that the ground must be plowed in order to kill noxious weeds. That this was an alibi in order to give Mr. Fugate more acreage is evident by looking at #4 picture, titled "Showing island under cultivation between channels". The thistles in the foreground are on the Reclamations main dike. Each year I receive many complaints from the lessee, and each year we purchase ammunition with which to drive ducks and geese from these fields. To eliminate this complaint from both the lessee and the homesteader, I would suggest that we acquire an area of this leased ground, properly post the same, put it into a crop each year for the birds. On the balance of these leases, the lease should contain a clause to the effect that no redress should be expected from migratory bird damage to their crops. For last spring the geese and ducks remained later than usual and did a supposed damage to sprouting grain.

On the Upper Klamath Refuge nothing can be done to improve conditions on the Refuge except cancel the leases which should be done at once for this is the most ideal and diversified nesting area of this entire district. And the cover on same which has not been destroyed for two years on account of high water should remain intact. The mere fact that the Reclamation Service has leased 5520 acres which is all the available land and marsh area of this wonderful Refuge for the small sum of \$418.90 is unbelievable.

2843.40

With reference to the small island in Lost River and located near Olene, Ore., Mr. Gabriel who leases this has made the statement many times that he has found as high as 15 to 20 goose nests on the island a season prior to the time 2 years ago when he put hogs and goats on there to clean off the vegetation and cover. Affidavits regarding the gun club offer and the nesting possibilities of this island can be obtained. This lease should be canceled, the island to lie dormant.

Channel at Clear Lake will not be deepened according to Mr. Hayden.

Very truly yours,

Amurroster.

1047 IN ADSEP.
BY EX AT 8:17 TO BE MIN
CALLS

UNITED STATES DEPARTMENT OF AGRICULTURE

BUREAU OF BIOLOGICAL SURVEY

Tule Lake Wild Life Refuge.

Box 50 Merrill, Ore.

June 9, 1934

IN REPLY REFER TO

Mr. William L. Finley,
Rt. 10, Portland, Ore.

Dear Mr. Finley-

With reference to your letter of June 3, 1934. I will be very glad to assist you in obtaining what ever pictures you require or desire from this vicinity. I will be quite busy the week of June 10, to 16 I could however meet you in Klamath Falls the night of June 17, to leave the next day for the Upper Klamath Refuge where I have a boat and motor and a fine nesting of Egrets. These birds are just starting to set, this is a new record I believe for this bird in my district.

Please advise me several days in advance if possible of your visit. The Avocet and Stilt colony doing nicely.

Very truly yours,

H. M. Worcester

H. M. Worcester.
U.S. Reservation Protector.

H. M. Worcester

Can't reach Klamath Falls till Tuesday night

Chgo at 2181

June 12 - 34

T E L E G R A M

A.N.Pack, 11 Morven Street, Princeton, N.J.

Referring to letter May third to Bell and Howell Company.

Wire if they are not sending Eyemo spools and other material. Must have time to get order from Eastman.

WILLIAM. L. FINLEY

Hayden Report

Copy to ~~Mr. Finley~~ Mr. Finley

Prior to the construction of Clear Lake Dam and the development of Clear Lake as a storage reservoir in connection with the Klamath Project, the Bureau of Reclamation purchased all of the privately owned lands within and bordering on the lake. Such of these lands as lie above the maximum flow line of the lake are with the consent of the Bureau administered by the Forest Service along with forest areas adjacent thereto. The area below the flowline, when uncovered by the summer recession of water, is leased to stockmen for grazing and for the raising of forage crops. The cash revenues from this source for the past four years are as follows: 1931 - \$2099.53; 1932 - \$1725.12; 1933 - \$2261.86; 1934 - \$3466.06. The monies received are applied as a credit to the construction charges and/or costs of the districts affected.

No leases were made of these lands prior to 1931, however, range stock had free access to the grass and weeds that grew along the water's edge, in spite of an attempt by the Biological Survey to fence off that portion commonly known as the "U" whereas the leases that are now authorized by the Bureau of Reclamation contain a clause to the effect that no grazing will be permitted between April 1st and July 1st, the nesting period of migratory birds. It is true that grazing during any period of the year destroys the cover necessary for nesting birds, but the present practice is much preferable to the former with no restrictions as to grazing time.

Due to a succession of dry years the shoreline of Clear Lake has receded so rapidly that there are no suitable nesting grounds in that vicinity and probably will not be until the return of seasons of more abundant rainfall. When favorable seasons return, the Reclamation Bureau might well entertain some reasonable proposition from the Biological Survey where the Survey would compensate the settlers for the agreed loss of revenue and the Survey then be permitted to fence the entire lake or any portion thereof for the complete exclusion of stock, due provision being made for stock lanes to accommodate range cattle and sheep. For the present no suggestions can be offered that will encourage the nesting of birds.

Within the Tule Lake swamp area about 10,600 acres have been diked off by agricultural lessees to hold the waters back from their leases. This 10,600 acres has been declared a bird reserve by the President of the United States. A large portion of the area grows up to tules and sugar grasses every year. In order to prevent this heavy mat of tules and grass from holding the spring floods in Lost River back and causing destruction of dikes, it has been the practice of this office to set fire to the growth prior to the spring runoff. Instead of permitting all of the feed value of this marsh to go up in smoke, it has been considered advisable to permit stock to salvage what they could during the winter months - October 15th to February 15th - when there could be no nesting of birds. No one acquainted with bird life will argue that the presence of stock within the area when the ice is strong enough to support them (they cannot exist there at any other time) will unduly molest the birds.

For the information of Mr. Finley, I might state that neither Tule Lake nor Upper Klamath Lake are suitable nesting areas for birds to any great extent for the reason that during the period when birds are nesting, the lakes are rising rapidly and endangering the nests except those placed well up on the dikes.

NY 2000 article

The greatest waterfowl nurseries on the Pacific coast regions are in the alkaline lake and wide marsh areas of southern Oregon, an area that would cover the map of Mass. Conn. and R. I. Several years of dry weather lowered the water then the surrounding homesteaders used the balance of the water to spread over their lands to produce hay for stock-
of

This land surrounding the alkaline lakes is poor quality. With plenty of good soil in all parts of the country these areas were of more value for the nesting and migratory flocks of water fowl.

Some parts of this region with the water gone have reverted to white stretches of alkali desert and on other sections hordes of grasshoppers hatch out and devour everything green in sight leaving the waste as if swept by fire. Country and government officials supply poison and aid the farmers in checking the insect pest because the gulls and other insect eating birds have disappeared.

It seems a useless circle to pay farmers in some places to reduce crops and help others on infertile soil to salvage products where the natural resources are of more value to the public.



American Nature Association

The state and federal laws protect these birds. A man is arrested and fined for killing one out of season. Yet untold thousands are on the road to final disappearance, and what can be done?

The water that formerly supplied the lakes has spread out over other lands to produce hay to raise more live stock. The government is paying some farmers to produce less ; but in these regions crops are produced only at the expense of the destruction of great natural resources. Birds the natural enemies of insect pests are destroyed and at the same time government authorities are supplying farmers with quantities of poison to kill the grasshopper hosts that are leaving the fields as barren of green grass as if they had been seeded by fire.

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF BIRDS
WASHINGTON, D. C.



REPORT OF THE BUREAU OF BIRDS
FOR THE YEAR 1914
PUBLISHED BY THE GOVERNMENT PRINTING OFFICE
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UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF BIRDS
WASHINGTON, D. C.

STATE GAME COMMISSION

The early records that we collected from market hunters in southern Oregon showed that in the late nineties they were killing approximately one hundred and twenty tons of ducks along the southern border of Lower Klamath Lake, and the northern border of Tule or Rhett Lake, each winter season and shipping these to the San Francisco markets.

Similar records from plume hunters on Malheur Lake thirty years ago showed that thousands of white herons, western grebes, and other birds were killed for their plumes to supply the millinery markets.

These destructive methods were stopped when Theodore Roosevelt issued two Special Executive Proclamations in 1908, establishing these two vast wild fowl nurseries as federal bird reservations.

With all of their killing, the market and plume hunters never wrought such havoc as occurred during the past few years when these great areas have completely dried up. Nearly a hundred and fifty thousand acres, including two of the largest breeding and resting places for water fowl, have been destroyed. These ^{marshes} were great breeding places for mallards, pintails, redheads, gadwalls, cinnamon teals, and others. Malheur Lake was the greatest breeding ground within the borders of the U. S. for Canada geese. The marsh was formerly white with the nesting multitudes of gulls, terns, pelicans, and there were colonies of American egrets, blue herons, white herons, Farallone cormorants, Caspian, Forrester, and black terns, ibis, and various kinds of wading birds.

Some of the bird multitudes have scattered. Many others were flying about from place to place with no possible chance of nesting and rearing their young.

Reclamation and Water Fowl

by
Arthur R. Fairley

The past and present policy of the Reclamation Service of the Department of the Interior in southern Oregon and northern California has been very destructive to wild life resources.

Part of this destruction comes from drying up swamps and lakes, the ancestral resting, breeding and feeding areas of ducks, geese and other migratory water fowl. This may be justified on the basis of developing more important uses of land and water for the public benefit.

On the other hand, acts not essential to irrigation and reclamation, that show unnecessary destruction of one public resource in developing another, cannot be justified. Claim is made that the Reclamation Service is guilty of such acts.

The Reclamation Service has priority rights in the development of certain lands and waters in the above mentioned district. The Biological Survey of the Department of Agriculture has secondary rights in protecting and developing the wild life resources on the lands and waters of this district.

II Our complaint is: *that*

exists
There has been and at present *is* a lack of co-ordinating the work of these two federal Departments both spending public funds.

The acts of the Bureau of Reclamation have nullified the services of the Biological Survey.

II The result has been:

A very great destruction of water fowl that could have been prevented.

Therefore we feel the rights of the Biological Survey in preserving wild fowl, although secondary, should be recognized.

The National Resources Board appointed by President Roosevelt under the authority vested in him by the National Industrial Recovery Act planned for the full development and use of land, water and other natural resources for the public benefit.

Migratory game birds such as ducks, geese and other species are an important natural resource of the country. They are protected by laws in various states, also by the Migratory Bird Treaty with Canada of August 16, 1916, the Migratory Bird Treaty Act of July 3, 1918, the Migratory Bird Conservation Act of February 18, 1929 and the Migratory Bird Hunting Stamp Act of March 16, 1934.

The sum of \$8, 500,000 was set aside recently to provide feeding, breeding and resting areas in various parts of the country.

The Congressional Act of March 10, 1934 provided for the co-ordination of different federal departments in wild fowl conservation.

The reclamation projects established in different western states created reservoirs or large bodies of water some combined with swamp areas which were recognized as advantageous sanctuaries for water fowl. In certain cases, all or parts of these areas have been created by Special Executive Proclamations as wild bird reservations. The Presidential orders establishing these sanctuaries provide against the destroying of nests and eggs or hunting or disturbing birds.

Formerly the strategical factor in waterfowl conservation on the Pacific Coast was the vast stretches of alkaline lake and marshes in southern Oregon and northern California, lying midway in the line of migratory flight between the northern breeding grounds and the southern winter feeding areas. In the first place, the marshes furnished nesting places for various species of ducks, geese and wading birds native to the West. In the second place, the shallow waters were the resting and feeding grounds for myriads of swans, ducks, snow geese and different species that dropped in from the long northern flight.

A leading cause in the disappearance of water fowl in the West was the drying up of these water areas. Some are being restored at the present time. The Reclamation Service is in a position where it can greatly aid in the increase of water fowl. Some reservoir sites are as important as wild fowl nurseries. Sump areas where the water is drained off the land after irrigation provide food and homes for water fowl.

The following case is presented where the Reclamation Service was instrumental in destroying a very valuable wild fowl reservation and creating in its place a great amount of useless land, a large part of which has been loaded upon unsuspecting farmers.

LOWER KLAMATH LAKE

Lower Klamath Lake, lying partly in California and partly in Oregon, was ceded to the government in 1904 and 1905 respectively by the legislatures of these two states. At the time, it was thought to be valuable for reclamation.

On August 8, 1908, President Theodore Roosevelt issued a Special Executive Proclamation creating Lower Klamath Lake into a wild bird reservation. This, of course, was subject to its use by the Reclamation Service.

The Lake was a natural sump area, being the lowest part of the Klamath Basin. Eighty thousand acres of shallow water and vast tule marshes made it one of the greatest wild fowl refuges in the United States. The supply of water came from a channel leading south from the Klamath River. The water flowing in or out kept the lake and the river on the same level.

Years ago, careful examinations were made of the soil in and around the bed of this lake by the Department of Agriculture. Dr. C. F. Marbut, soil expert, reported that all evidence pointed to the conclusion that successful agriculture could not be carried on within the area of deep tule peat or within the area formerly covered by water. Experiments proved this to be the case.

In the face of these facts, on November 30, 1917, the Reclamation Service entered into a contract with a land promotion corporation called the Klamath Drainage District. A dike was built across the channel; reclamation officials closed the gates cutting off the water from the Klamath River, and the Lake dried up by evaporation.

Lower Klamath Lake, an outdoor resource in its primitive condition, was traded for lands now partly deserted and partly held by a destitute class of farmers.

The following cases are presented where the Reclamation Service is destroying bird life on federal wild fowl reservations as a result of adopting a policy which is not essential to successful irrigation and reclamation.

UPPER KLAMATH LAKE

This is a reclamation reservoir in southern Oregon. A portion of the lake was set aside by executive order as a wild fowl refuge. This sanctuary is mostly open water and tule patches. It also contains about 5,220 acres of land and marsh which is ideal for feeding and nesting of water fowl.

The Reclamation Service has leased all of this breeding area to stock men with no restriction as to the number of sheep and cattle that can graze on it.

For several years past, Mr. H. M. Worcester, reservation protector for the Biological Survey, has reported that this lease is destructive to bird life.

The contention of the Superintendent of the Reclamation Service in this district seems to be that grazing is not permitted during the nesting season of birds and is therefore not destructive.

The facts are that birds need natural grasses and plants for food the same as sheep and cattle. They must have cover for nesting places. The livestock tramping through these areas day after day destroy both the food and nesting sites of water fowl.

The sum of money received by the Reclamation Service for grazing rights on this sanctuary does not compensate for the amount of destruction. Supplying grazing permits to stock men is not a service essential to irrigation or reclamation.

CLEAR LAKE

In 1912, when I made a survey of bird life on Clear Lake, it was a body of water about eight miles across east and west and stretched north and south for ten or twelve miles. In the tule patches near the mouth of Willow Creek were large numbers of western grebe^s and Forster's terns nesting. On the islands in the lake were colonies of gulls, pelicans, cormorants, etc. All around the border of the lake was natural plant life where different species of ducks and many Canada geese were nesting. The sage brush areas around the border were abundant breeding places for sage hens. The value of this sanctuary lay in the number and variety of bird life and its distance from any settled area.

Clear Lake lies in Modoc County, northern California. April 11, 1911, it was established as a federal wild life refuge. The Reclamation Service built a dam across Lost River at the outlet of the lake. The water has receded year by year. A ditch was dug back from the dam to draw off more water, and this now extends several miles from the dam, only a small portion of the full lake bed remaining.

The water level of Clear Lake has been lowered to the limit so that at present its use for irrigation has little value. As the waters receded within the borders of the refuge, vegetation covered the land furnishing good nesting and feeding areas for ducks, geese and other birds.

The policy of the Reclamation Service then created havoc within the sanctuary. The uncovered lands were leased to stock men. Four leases were signed turning over 14,120 acres of the best parts of Clear Lake Reservation. The average price received by the Reclamation Service was 22¢ per acre per year.

During the breeding season, flocks of sheep not only grazed off the natural vegetation but also destroyed the nests of birds. They tramped through colonies of terns and gulls, killing the nestlings.

Roving bands of sheep have destroyed large numbers of sage hens, a disappearing species. Mr. Worcester, the warden in charge, counted approximately a thousand sage hens in one area be-

fore it was grazed. Later after it had been given over to sheep, he counted only fifteen birds.

To prevent further destruction of bird life on this refuge, the Biological Survey constructed fences across points of land near the lake to keep sheep and cattle away from remaining bird colonies. Inside the fences was plenty of natural vegetation; on the other side was a barren waste with scarcely a blade of grass.

During the past summer while the Reclamation Service has been receiving money for grazing leases and destroying birds at Clear Lake, the Biological Survey has been spending Federal funds to conserve birds. The Federal Warden, Mr. Worcester, used \$3600.00 in building eight miles of new fence in an effort to make a portion of this sanctuary safe for birds.

This is a definite case where the acts of one department of government nullifies the efforts of another branch of service, when the Federal Law provides for co-operation in wild fowl conservation. Another case may be cited.

TULE LAKE

Tule Lake in northern California was formerly a body of water about twelve or fifteen miles long and ten or eleven miles wide. The west side of the whole northern border was a vast tule marsh and a natural wildfowl nursery. This was taken over by the Reclamation Service. The northern part was dyked and has been taken up by settlers. The southern half, about 65,000 acres, was designated as a sump area because it is the lowest level of the basin and is needed as a drain to let the water run off the northern part after irrigating.

Approximately ten thousand acres in the center of this sump area was set aside by Presidential Proclamation, and is known as the Tule Lake Wild Life Refuge.

The permanent settlers occupying the northern part of Tule Lake hold their lands subject to a construction charge for dams, dykes, etc. of about \$90.00 per acre. The balance of the land in the sump area on the east, south, and west sides of the wildfowl refuge is leased to farmers under five year contracts at an average of about \$2.50 per acre per year. Crops of hay and grain are produced on this government land.

The refuge itself is a large open body of water with many patches of tule or club rushes. A small part of the refuge at the northeast corner is above water level and is a valuable feeding and breeding area for ducks, geese, and wading birds.

Even though the Reclamation Service is leasing out government lands on three sides of the refuge, they began in 1933 to lease this area within the sanctuary to stockmen. For a rental of \$250.00 per year cattle were returned into the refuge. The meadow

land was cut up and tramped, destroying the food and nesting cover of waterfowl. The revenue received was small, the damage to bird life large.

With the drying up of many lakes through southern Oregon, the concentration of ducks and geese around Tule Lake has increased. The refuge should be enlarged to furnish food for these birds.

Instead of leasing its own lands to farmers to increase crop production, the government should take these lands in the sump area out of production and make an adequate sanctuary for birds.

The Reclamation Service has leased a small acreage of land lying between the two channels of Lost River adjoining the refuge on the North. This was swampy and was needed as a nesting ground. This swamp land together with about thirty more acres was leased for a period of five years to a stockman at a yearly rental of \$180.00.

An island of twelve acres in Lost River was a favorable nesting area for ducks and geese. It was especially desirable during the winter season on account of warm springs above that kept the river open and free from ice when other water areas froze up. Thousands of ducks and geese frequented this place to feed and rest.

Regardless of its value to waterfowl, the Reclamation Service leased it for \$25.00 to a man who turned in hogs to clean off the vegetation and cover. The lessee in turn has contacted sportsmen at Klamath Falls with a proposition to re-lease this area to a hunting club for \$100.00.

In conclusion, the Bureau of Reclamation could greatly assist in wildfowl protection and restoration by cancelling these leases and stopping the grazing of livestock on wildfowl reservations. Reclamation officials in the Klamath district have promoted the uses of land and water, but have been unmindful of the protection and development of wildlife resources.

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RECLAMATION IN THE KLAMATH DISTRICT
AND ITS EFFECT ON WATER FOWL

by

William L. Finley

During the late 90's market hunters carried on a prosperous business along the Oregon-California boundary at Lower Klamath and Tule Lakes. The records of the Game Transfer Company in San Francisco showed that one hundred and twenty tons of ducks were shipped to market from this region in one season. The passage of state laws in Oregon and California stopped this traffic.

Today the records show that the Bureau of Reclamation of the Department of the Interior have killed far more water fowl than all of the market hunters combined because they have destroyed the vast breeding, feeding and resting areas.

Without doubt the Reclamation Service has greatly increased the productive agricultural land in this district, (but it is a serious question as to whether the crops will ever pay the big costs of dams and ditches. Some projects in the district have been destructive when we consider the best public use of land, water and other natural resources.

A study of Reclamation work as carried on by the Project Superintendent of the Klamath district shows the following:

1- This Department of the government has dried up swamps and lakes, corraling the entire water supply with the idea that all land and water uses are for one purpose only.

2- The wild life resources belonging to the people as a whole have not been protected, but have been destroyed.

3- There has been an utter lack of coordinating the activities of the Reclamation Service of the Department of the Interior and the Biological Survey of the Department of Agriculture. The former has been in dominant control, destroying resources entrusted to the protection of the latter.

4- With the prestige of the government behind it, this Department has played the double role of land shark and land lord. Some land is sold outright to farmers at exorbitant prices. Other areas are leased to farmers at low prices, creating an unfair competition in crop production.

Let us take up various projects in the Klamath district and see how these have been handled by the Reclamation Service. Have they been managed to develop the full use of land, water and

other natural resources, or has it been a commercialized regime of selfish land engineers?

LOWER KLAMATH LAKE

Under the mistaken idea that Lower Klamath Lake should be dried up and made into agricultural land, the state legislatures of Oregon and California deeded this area to the federal government. Approximately \$283,000. was spent by the government on the Lower Klamath Lake Project. Careful examinations were made of the soil in and around the bed of the lake by the Department of Agriculture. Dr. C. F. Marbut, Soil Expert, reported that all evidence pointed to the conclusion that successful agriculture could not be carried on within the area of deep tule peat, or within the area formerly covered by water.

August 8, 1908, President Theodore Roosevelt by Special Executive Proclamation created Lower Klamath Lake into a wild bird reservation. This, of course, was subject to its use by the Reclamation Service. With the complete knowledge in hand that this area was not good for agricultural land, but apparently with the sole idea of getting back the money expended on this useless project, the Reclamation Service sold out to the Klamath Drainage District which was a land promotion scheme. This corporation has no connection with the Klamath Irrigation Project sustained by the waters of Upper Klamath Lake.

The water of Klamath River was shut off from flowing into Lower Klamath Lake and the Lake dried up by evaporation. This also dried up White Lake an area to the east of Lower Klamath.

Lower Klamath Lake Reservation contained about 85,000 acres of shallow water and vast tule marshes and was the ancestral breeding, feeding, and resting place of myriads of ducks, geese, and other water fowl. The federal government made a serious blunder in destroying one of the greatest wild fowl refuges in the United States and turning over a vast section of very poor or useless agricultural soil to unsuspecting farmers. The federal government should right this wrong.

Another serious blunder that may be laid to the Reclamation Service in this district was tying up the water rights of Klamath River and Upper Klamath Lake in two contracts with the California-Oregon Power Company. Although the Reclamation Service admits that there has never been a shortage of water in Upper Klamath Lake even in the driest years, yet none of this water could be used to flood an area to conserve water fowl. It can only be used for irrigation and power development.

Years ago George Chamberlain, Governor of Oregon, said

the Oregon Legislature would never have passed the necessary acts giving the government control of this water if it had known the Department of the Interior would turn the power development over to private parties.

Upper Klamath Lake.

A portion of Upper Klamath Lake was set aside as a wild fowl refuge and placed under the supervision of the Biological Survey of the Department of Agriculture. Since our water fowl are protected by state and federal law, and we are bound by a treaty with Canada to conserve migratory birds, this area should be a sanctuary where birds could at least breed undisturbed.

It is taken for granted that under the law the duties of the Reclamation Service pertain, engineering, care of dykes and dams, and the details of furnishing water to various lands. Why should this Department act as landlord in leasing out to stockmen areas within a federal wild bird reservation when this destroys water fowl and is a direct violation of the rules and regulations of the Biological Survey of the Department of Agriculture?

For several years past Mr. H. M. Worcester, Reservation Protector, for the Biological Survey, has repeatedly reported not only the lack of protecting water fowl, but the unnecessary destruction of bird life resulting ^{FROM} in the tactics of the Reclamation Service.

The Upper Klamath Refuge embraces open water, tule patches, and about 5520 acres of land and marsh which is an ideal nesting area. All of this breeding ground has been leased out to stockmen with no restriction as to the number of sheep and cattle ^{that} can graze the area. While provision was made in the leases that grazing was not permitted during the nesting season of birds, yet destroying the cover of natural grasses and plants destroys the food and nesting places of birds.

The sum of money received by the government for grazing on a wild fowl sanctuary does not compensate for the amount of the destruction.

Clear Lake.

This was originally a large body of water in Modoc County, northern California. The Reclamation Service built a dam across Lost River at the outlet of the lake.

In 1912 when I investigated this federal refuge, the water was part way up on the dam, the lake was about eight miles across east and west, and about ten miles stretching north and south. In the tules patches near the mouth of Willow Creek were

large numbers of western grebe and Forster's terns nesting. On the islands in the lake were colonies of gulls, pelicans, cormorants, etc. All around the border of the lake was natural plant life where different species of ducks and many Canada geese were nesting. The sage brush areas around the border were abundant breeding places for sage hens. The value of this sanctuary lay in the number and variety of bird life and its distance from any settled area.

From the beginning the control of this area, governed by the Reclamation Service, showed no interest in bird life. The course of years has piled up an appalling destruction. Partly on account of dry seasons the water in the lake bed receded. As it grew less the Reclamation Service built a ditch to draw off more water. This ditch now extends several miles from the dam to meet the remaining water in the lake. The lake has been lowered until at present it is only a small portion of the full lake bed in 1912.

If the continued lowering of this lake came from the demands of farmers for water, the demands are now much greater as the supply is about exhausted. The water level has been lowered too much and the condition of the country affected. Since there is no surplus, why drain the reservoir to the danger point?

This is only a part of the story of Clear Lake Reservation. As the waters receded within the border of the refuge a variety of vegetation covered the land furnishing abundant nesting and feeding areas for ducks, geese, and other birds. Then the Reclamation Service began leasing these areas to stockmen.

Mr. Worcester's reports give the details of four leases, some running for several years, covering 14,120 acres of land on the best parts of Clear Lake Reservation. This land is leased to cattle and sheep men at an average price of twenty-two cents per acre per year.

Grazing bands of sheep have not only eaten off the natural vegetation on this wild fowl sanctuary, but they have tramped out the nests of birds. They have tramped through colonies of terns and gulls, killing the young birds. During the past season one colony of gulls have nested on a little knoll six or eight miles away from any water. Having no protection here, it looks as if all the gulls in this area are likely to be destroyed.

Roving bands of sheep have destroyed large numbers of sage hens. In one place where Worcester counted approximately a thousand sage hens, after the area had been grazed by sheep he surveyed the same region and counted fifteen birds.

While these depredations have been going on, the Bio-

logical Survey has been spending public funds employing wardens to protect bird life on federal refuges. They have constructed fences across points of land in an effort to keep cattle and sheep from destroying the few remaining birds. The photographs that I took on Clear Lake Refuge show natural vegetation on one side of the fence as a protection to birds. The other side of the fence is a barren waste with scarcely a blade of grass.

At the present moment the Biological Survey has some fifteen men ~~that~~ work on Clear Lake Reservation constructing eight miles of fence in an effort to save the bird life. Up to date \$2750.00 of federal funds have been allotted for this purpose.

Clear Lake Reservation was created by the President of the United States to preserve bird life. A man may be arrested and fined for disturbing or destroying wild birds, their nests and eggs, under the rules prescribed by the Secretary of Agriculture. Yet the Reclamation Service can thwart the proclamation of the President by leasing a wild life sanctuary at twenty-two cents per acre and destroy untold numbers of birds.

This is a clear case of one department of the government nullifying the efforts of another department whose sworn duty it is to protect these wild life resources.

Tule Lake.

When I cruised across Tule Lake in 1908, it was a body of water about twelve or fifteen miles long and ten or eleven miles wide. It was supplied by the water of Lost River entering from the North. It will be remembered that Lost River was the outlet of Clear Lake. The west side and the whole northern border was a vast tule marsh and a natural wild fowl nursery.

This area was taken over by the Reclamation Service and is now handled, a division of the Klamath Project. (This refers to Upper Klamath Lake, not Lower Klamath.) The ~~whole~~ northern part of this area is good agricultural land, irrigated from the Upper Klamath, and has been taken up by settlers in comparatively small tracts of about fifty or sixty acres. The southern part, about 65,000 acres, was designated as the sump area and is held by the Reclamation Service. This is the lowest level and is needed as a drain to let the water run off the northern part after irrigating.

Approximately 10,000 acres of this sump area lying in Siskiyou County, California, was set aside by Presidential Proclamation and is known as Tule Lake Wild Life Refuge.

The policy of the Superintendent of the Reclamation Service of the Klamath District is clearly shown in the ~~handling~~

of the public lands in the Tule Lake area. This is designated as the Tule Lake Division of the Klamath Irrigation Project. It receives water through the main canals originally built for the Klamath Project. While the cost of these main canals was originally assessed against the Klamath Irrigation Project, when the Tule Lake Division was added these lands took up a good part of the assessment.

The settlers on the northern part of the Tule Lake area are carrying government costs of ~~of~~ dams, dykes, etc of \$90.00 per acre. They also carry the cost of furnishing water for irrigation, which, as I recall, runs about \$1.50 per acre per year. With expenses of improvements and farming, these homesteaders are carrying a load that is not likely to be lifted by the products they produce on the land.

The balance of the land in the sump area on the east, south, and west sides of the Refuge is held by the Reclamation Service and as landlord it leases this land to farmers under five year periods at an average of about \$2.00 per acre per year. The lessee constructs and maintains the necessary dykes to water his land, but he can pump his irrigation water from the sump without charge. These leased lands produce similar crops of equal value to those lands owned by the settlers on the North who are under the burden of a big federal debt.

The Reclamation Service has created a bitter conflict between the residents on the North who own their land by assuming a heavy federal debt, and the lessees on the South. The settlers on the northern half feel they have shouldered an excessive cost for the main canals of the Klamath Drainage District. The lessees on the South are carrying no such load. The Reclamation Service has therefore created an unfair competition in crop production.

If the Department of the Interior wants to take farm lands out of production, here is the place to do it. Let the Reclamation Service cease leasing its government-owned land to farmers at a low rental because these compete unfairly with other farmers carrying a huge load of debt incurred by the Reclamation Service.

There are actual cases, I was told, of farmers in the Tule Lake Division who are paid by the government not to produce certain crops. On the other hand, the government is leasing its own land a mile or so away at a low price so farmers can produce these same crops.

This is a conflict known by residents of northern California and should be corrected because of the bitterness aroused against the government by such inconsistency. Whether this policy originated with the Project Superintendent at Klamath Falls, or whether it is a general policy of the Reclamation Service, I do not know.

The Tule Lake Refuge is not large enough for the purpose for which it was created. During the migrating season the ducks and geese have to feed on the surrounding lands. Each year Mr. Worcester gets many complaints from the lessees and the government has to purchase ammunition to drive ducks and geese from their fields. The whole sump area should be a wild life refuge to take the place of other swamp and lake areas destroyed by the Reclamation Service. The federal government already owns this land. It should be taken out of cultivation in fairness to farmers on the northern half who are trying to make a living. Why should the government act as landlord and lease these lands when they are of more value to the public in preserving our wild life resources?

Let us look at the present conditions at Tule Lake Refuge. There is quite a large open body of water with many patches of tule or club rushes, especially around the border. These floating tule islands so-called, are good nesting places for certain varieties of water fowl, but others nest on land in natural vegetation near the water. A section of land along the northern border of the Refuge is above the water level and is a very valuable breeding place for ducks, geese, and wading birds. It had a good growth of grass and plant life.

Even though the Reclamation Service is leasing lands on three sides of the Refuge they began in 1933 to lease this land within the Refuge to stockmen. For a rental of \$250.00 stock were turned in on the Refuge. The meadow land was cut up and tramped and the natural food of ducks and geese destroyed. This small amount of revenue in no way compensated for the damage done to bird life.

In addition to the above damage, the Reclamation Service leased a small acreage of land lying between two channels of Lost River adjoining the Refuge on the North. This was swampy and should have been kept as a nesting ground. This, with a tract of thirty some acres, was leased for a period of five years to a stockman at a yearly rental of \$180.00.

An island of twelve acres in Lost River was a very favorable nesting area for geese and ducks. It was especially desirable during the winter season on account of warm springs above that kept the river open and free from ice when other water areas freeze up. Thousands of ducks and geese frequent this area to feed and rest.

Regardless of its value the Reclamation Service leased it for \$25.00 to a man who turned in hogs and goats to clean off the vegetation and cover. The lessee in turn has contacted sportsmen at Klamath Falls and made a proposition to re-lease this area as a hunting club for \$100.00.

This lease like others entered into by the Reclamation Service, should be cancelled. Also leases for grazing on wild fowl reservations should be annulled.

In conclusion, I feel that the above facts demand a full and careful government investigation of the Superintendent of the Reclamation Service at Klamath Falls. Settlers who have complaints have a right to be heard. Under present conditions their grievances are not likely to reach the Secretary of the Interior. They are likely to be careful lest they incur the displeasure of Reclamation officials in this district who are in the position of a landlord holding heavy mortgages and many leases.

In the second place, the Superintendent of the Reclamation Service in this district has dominated and prevented the broader use of land, water, and natural resources. With an utter lack of vision to see the picture as a whole, he has nullified the services of another Department of the Federal Government which was also created to serve the people of this country.

POWER MARKETING WILL BE STUDIED

Regional Planning Sub-Committees Meet Today.

LUNCHEON PLANS LAID

Haw and Schmitt of Special Reclamation Committee Here to Confer With Groups.

Study of marketing areas and outlets for hydroelectric power of the Pacific northwest will begin today at a meeting of all subcommittees appointed by Colonel Thomas M. Robins, chairman of the regional committee on water resources and power under the Pacific northwest regional planning commission. The subcommittees will be organized this morning at 10 o'clock in the office of the division engineer, North Pacific division, Pittock block, Portland, to consider and report on hydrography, power development, navigation, flood control, irrigation and fisheries.

This body of men will join a luncheon meeting today at 12:15 at the Portland Chamber of Commerce building, where the two members of a special reclamation committee appointed by Harold L. Ickes, secretary of the interior, will be guests.

Reclamation Projects Studied.

John W. Haw, agricultural director of the North Pacific Railway company, and F. B. Schmitt, editor of the Engineering News Record, comprise the special committee which is making a study of the usefulness of reclamation projects.

Mr. Haw and Mr. Schmitt are studying five typical reclamation projects at Huntley, Mont.; Kittitas division of the Yakima project, Yakima, Wash.; Orland, Cal.; Yuma, Ariz., and Strawberry, Utah. "Information and opinions will be solicited from water users, project managers and district boards of agricultural experiment, educational institutions and state officials," stated a letter from the committee.

"The people of this country do not universally subscribe to the wisdom of our present reclamation policy nor to the further use of federal funds to construct irrigation works. So far as this committee is concerned, we assure you of our impartial viewpoint and we honestly seek facts relative to the present situation and opinions of well-informed western people as to what is a wise course for the federal government to follow in reclamation of arid land in the future," they stated.

Luncheon to Be Held.

Directors of Oregon reclamation, headed by Marshall N. Dana, president of the National Reclamation association, also will attend. The committee members will reach Portland at about noon today, traveling by automobile, and will leave at 10 o'clock tonight, going south to Willows, Cal.

The luncheon will be attended also by representatives of the State Chamber of Commerce, who will convene today at 10 A. M. in conference room A of the Portland Chamber of Commerce building to consider the care of drouth relief immigrants who are coming to Oregon.

In a letter to Walter W. R. May of the Portland Chamber of Commerce, V. R. Stanberry, state planning consultant with the regional planning board, stated relative to drouth relief:

"In the absence of a state land

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of one corner with the basket.
Pattern 797 comes to you with com-

zoning law in Oregon restricting the sale or conversion of sub-marginal land for agricultural use, public officials and private agencies might operate in an intelligent program to take care of the people who are now migrating in increasing numbers to Oregon in the hope of making a living by farming.

"If a sensible land settlement program is not adopted and carried out, large numbers of these immigrants may fail in their attempts to establish themselves here and eventually, after much wasted time and effort, may revert to the relief rolls and become public charges."

VOTE ESTIMATION MADE