

**SECTION II:  
Reports, etc. relating to various hydraulic engineering projects**

**BOX 4, COLORADO RIVER PROJECTS**

Finding Aid states:

Box 4

|   |    |
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| Colorado River Basin (general material) 1921-1927           | 27 |
| Colorado River Compact & Commission 1921-1928               | 8  |
| Colorado River-Los Angeles Gravity Flow Aqueduct, 1928-1941 | 33 |

*ACCESSED 11 AUGUST, 2007 DIANE LARUE (DLR)*

DLR Summary

| FOLDER NO.   | PIECE             | SELECTED CONTENTS  |
|--|-------------------|--|
| <b>1</b><br>1921 - 1927<br>Colorado River Basin<br>(in general)<br>27 pieces | <b>Envelope 1</b> | Maps and newspaper clippings, including about syndicates to develop Mexican land   |
|  | <b>Envelope 2</b> | <ul style="list-style-type: none"> <li>- Several copies of ECL testimony to House Committee in Congress</li> <li>- Colorado River Project</li> <li>- "Irrigation and Water Power in Colorado River Basin", no date, by E. C. La Rue</li> <li>- "Memorandum on certain phases of the problems of development on Colorado River", no date, by Herman Stabler</li> <li>-Chapter 44 <u>An Act to Establish the Grand Canyon National Park in the State of Arizona</u>, 3 pages</li> <li>- "Confidential copy" of introductory chapter to "Golden Rivers - The Colorado- The Nile of America" by George H. Maxwell - all about the conspiracy to create in America a vast center of Asiatic Agricultural enterprises, to plant Asiatic Competition - all to end in another world war. 11 pages</li> <li>- Another copy of Maxwell's document, 55 pages</li> </ul> |

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|  | <p><b>Envelope 3</b><br/>Miscellaneous reports, speeches, etc. 6 pieces</p> | <p>- Jan 12, 1926: Dept of Interior Memorandum for the press - Boulder Canyon Project with estimated cost of \$125 million recommended today by Secretary Work of Interior Dept.; includes All American Canal, water to Mexico, generation of power - 16page document</p> <p>- Mar 1926: ECL paper: "Value of Water Stored at Glen Canyon and Boulder Canyon on Colorado River" 12pages</p> <p>- Press release to be released for afternoon papers of April 26, 1926. Hubert Work's address to be delivered before the Los Angeles Club at Los Angeles, Calif. "Interior Department is the chief custodian and conservator of what is left of the nation's resources."</p> <p>General Land Office, Geological Survey, National Park Bureau, Indian and Reclamation Bureaus. 10pages</p> <p>- Press release for afternoon papers of Friday April 30<sup>th</sup>: Memorandum of Speech, Delivered by H. S. McCluskey, Secretary to Governor Hunt Before the Women's Friday Morning Club of Los Angeles, April 30, 1926 re Arizona's opposition to Boulder Canyon: all for California, and not for Arizona; object to irrigation in Mexico, "...irrespective of the fact that it is owned by California millionaires who are strong politically, socially and financially..." 8 pages</p> <p>- Memorandum of Speech of H. S. McCluskey (member of Arizona Colorado River Commission) to the University Club of Pasadena, California., June 6, 1927, 8:00 pm 15 pages - explains Arizona's position; Swing Johnson Bill is water for California</p> <p>- "Development of Colorado River" by ECL, 9 pages, with his recommendations. 2 copies</p> |
|  | <p><b>Envelope 4</b><br/>Report</p>   | <p>- Draft of Report, no title page. Contents are 5 pages, 2 copies; Purpose and Scope of Report (8pages). On page 1 "With completion of the work in the Grand Canyon in October, 1923, the United States Geological Survey has mapped 1800 miles of the Colorado and its principal tributaries. ... In September, 1924, six additional dam sites between Devils Slide and Bulls Head were surveyed." USGS surveys of water resources began in 1889 by establishing gaging stations on main stream and its important tributaries.</p>   |
|  | <p><b>Envelope 5</b><br/>Past Development and Charts</p>                    | <p>- pages 1-14 of Dept of Interior, Bureau of Reclamation Report on the Problems of Colorado River Basin, vol # 2 Irrigation Development in the Upper Basin. Feb 1924: Past Development; Future Development; Upper Basin Summary of irrigation development.</p> <p>- Handwritten "inflow between Lees Ferry and Bright Angel, 1922-23</p> <p>- Handwritten "Colorado River at Topock, 1884" calculates discharges at Lees Ferry and at Yuma; And discharge near Fruita, Colorado</p> <p>- "Colorado River Storage Possibilities Above Lees Ferry at elevation of 3127 feet"; "Storage at elevation 3150 feet"; Mouth of San Juan River, elev 3258 feet; Fremont River above mouth; Colorado. River. Above Mille Crag dam site, elevation 3475 feet.; San Juan River (Dam-site at 3490 foot crossing)</p>   |

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|   | <p><b>Envelope 6</b><br/>2 reports<br/>Waltham<br/>Kelly and<br/>ECL</p>       | <p>- Federal Power Commission, Washington D.C., Report of Colonel William Kelly (Corps of Engineers) on the Colorado River. 35 pages of text and lots of maps. Many gage and discharge graphs included for lower Colorado River 1916, silt percentage curves, water surface profiles below Yuma, Cost of All American Canal.</p> <p>- ECL's Discussion of the paper "The... Colorado...River...Problem" by Col. Wm. Kelly, N. Am. Soc. C. E. And Chief Engineer, Federal Power Comm. Mr Kelly's paper was presented at the Fifty Fourth annual Convention of the American Society of Civil Engineers, Pasadena, June 19, 1924.</p>   |
|   | <p><b>Envelope 7</b><br/>re Arthur P.<br/>Davis and<br/>Colorado<br/>River</p> | <p>- Newspaper article, and correspondence re James William Martin, Arthur P. Davis US Reclamation Service, and ECL feeling he has been misquoted, and not right that two arms of Dept of Int. in controversy</p>  |
|   | <p><b>Envelope 8</b><br/>Misc<br/>speeches, etc.<br/>2 pieces</p>              | <p>-Annual Dinner Engineering Society of Pasadena, at Vista Del Arroyo Feb 15, 1922</p> <p>-2 pages by ECL</p>   |
|   | <p><b>Envelope 9</b></p>   | <p>The Colorado River Basin - 2 copies, April 4, 1922</p>  |
|   | <p><b>Envelope 10</b></p>  | <p>- Colorado River Basin and Suggested Plan of Development of the Lower Basin</p> <p>- At Riverside to League of Southwest, Dec 8, 1921 Convention</p>  |
| <p><b>2</b><br/>1921-1925<br/>Colorado River<br/>Compact and<br/>Colorado River<br/>Commission<br/>8 pieces</p> |  | <p>- Many newspaper articles</p> <p>- Typewritten: "Colorado River Compact" - 4 pages</p> <p>- Typewritten: "A Bill to Provide for the Removal of the Flood Menace on Lower Colorado River", 1923</p> <p>- Memorandum relative to the Colorado River by ECL draft copy. To Grover. Plus cleaned up copy</p> <p>- Memorandum for Hon. Hubert Work, Sec of Int., Dec 16, 1925, 2 pages In ECL's opinion "... the Compact is legally unsound. It was formulated on the wrong basis. It is impossible to determine how much water is being consumed in the Upper Basin.....The Compact does not protect Arizona as against California and Mexico were...."</p> <p>- Press notice from USGS for evening of March 15, 1922: "An Equitable Division of the Water of Colorado River"</p> |
| <p><b>3</b><br/>1928-1941<br/>Colorado River - Los<br/>Angeles Gravity<br/>Aqueduct<br/>33 pieces</p>           |  | <p>DLR - not looked at</p>   |

## BOX 5, Colorado River Projects

Finding Aid states:

|   |               |
|---|---------------|
| Box 5, Colorado River Projects              | No. of Pieces |
| Boulder Canyon, 1921-1928                   | 3             |
| Glen Canyon, 1922                           | 28            |
| Lower Colorado River Development, 1921-1924 | 11            |
| Lee's Ferry, 1923-1938                      | 15            |
| Marble Gorge, 1927                          | 3             |

ACCESSED 25 and 26<sup>th</sup> February, 2008 DIANE LARUE (DLR)

DLR Summary

| FOLDER NO.  | PIECE                       | SELECTED CONTENTS  |
|---|-----------------------------|--|
| <b>1</b><br>1921-1928<br>Boulder Canyon<br>3 pieces | 1                           | Blueprint scaled drawing of Black Canyon Reservoir Site, US Reclamation Service  |
|   |                             | 5 sequential drawings, each 10 x 12", scaled, Boulder Canyon Reservoir Site. US Reclamation Service; plus 2 more scaled drawings   |
|   |                             | Clipping Los Angeles Times, Nov 1946 on Hoover Dam and ECL's Bridge Canyon proposal  |
|   |                             | Boulder Canyon Construction Job drawing  |
|   |                             | Blueprint Black Canyon /reservoir Site. US Reclamation Service   |
|   | Bound Report<br>Typewritten | Report on Design of Proposed Boulder Dam Canyon Dam by B.F. Jakobsen, Consulting Engineer, Los Angeles. Nov 17, 1928 with letter to Hon. George W. P. Hunt, Colorado River Commission of Arizona   |
|   | Office<br>Memorandum        | Boulder Canyon Project by E.F. Scattergood, Oct 20, 1921. Project is key to lower CR development in that it combines irrigation, flood control and power interests to the best advantage in a single project.  |
|   | Letter and<br>Report        | From Grover to ECL, May 13, 1924 in reply to ECL letter of May 1 requesting certain information. Storage capacity, height information. Report is summary of Boulder Canyon Reservoir. Damsite located on Colorado in Black Canyon, 31 miles downstream from mouth of Virgin River. |

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| <b>2</b><br>1922<br>Glen Canyon Dam Site<br>28 Pieces | Bound typewritten report  | “The Geologic Setting of the Lee Ferry Dam Site” by Kirk Bryan, Geologist, USGS. A discussion of an article by E. C. LaRue, M. Am. Soc. C. E., entitled “Tentative plan for the construction of a 780-foot rock-fill dam, on the Colorado River, at Lee Ferry, Arizona”. Proc. Am. Soc. C. E. Vol. XLVIII, No. 4, pp. 835-852, April 1922.   |
|   | Oct 1922 Bound typewritten report and 2 letters   | - Oct 6, 1922 Letter from ECL and report to Clarence C. Stetson, Assist H. Hoover, Sec of Commerce in compliance to his request for information, Glen Canyon dam sites<br>- Report: “Preliminary Report Glen Canyon Dam Sites Colorado River”<br>Oct 9, 1922 Letter to Stetson from ECL<br>Oct 17, Letter from Geo. Holbrook to Grover with copy of ECL’s preliminary report on Glen Canyon dam sites. |
|   | Dec 20, 1922 Letter   | From Board of Engineers to Director. From Weymouth, Ransome, Hill and Wiley about Glen Canyon Dam Site and why it is not good. They went to Lee’s Ferry on 13 <sup>th</sup> Dec, examined upper and lower dam sites on 14 <sup>th</sup> and 15 <sup>th</sup> and returned to Flagstaff on 16 <sup>th</sup> . 2 copies  |
|   | Dec 24, 1923  | Letter from H.W. Dennis, Construction Engineer with Southern California Edison Company in Los Angeles to ECL re the Kelley Dam site on the Colorado River  |
|   | <b>Envelope</b><br>Glen Canyon Dam Sites  | Exhibits A, B, C, D: 4 large drawings of sites   |
|   | <b>Envelope</b>   | Map, Cross Section, and Area and Capacity Curves for Glen Canyon Flood-Control and Power Site No. 1 (Plate V, Water-Supply Paper 556)  |
|   |   | USGS data book, handwritten notes, legal issues; capacity figures for Glen Canyon Reservoir, and data for Mono Tunnel Project  |
|   |   | Large canvas-backed scaled map of Colorado River, Glen Canyon Reservoir Site, 1" = 2 miles   |
| <b>Envelope</b><br>Glen Canyon Res.                   | Graphs: Rating Curves<br>Handwritten: Table of calculations<br>Six sheets containing tables of areas and capacities of reservoir site above Lee Ferry with letter from ECL to Grover; Grover’s reply<br>Handwritten tables<br>Blueprint: Profile of Colorado and San Juan Rivers<br>Blueprint: Estimated Reservoir Capacities, Grand Canyon on Colorado River |  |

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| <b>3</b><br>1921 - 1924<br>Lower Colorado River<br>Development<br>11 pieces   | Loose  | Printed copy of Smith, Walter D., Oct 22, 1914, "A Suggested Plan for Developing the Lower Colorado River", Engineering News, Vol 72, No. 17. 2 pages. With drawn map of 'Colorado River Basin in Mexico, Classification of Lands', Bureau of Reclamation, Denver Nov. 1923   |
|   | <b>Envelope</b><br>1921 Aug  | Typewritten report by ECL: 'Tentative Plan for Storage and Power Development on the Lower Colorado River', 23 pages + 2 drawings<br>Carbon copy of same with different line spacings, 26 pages  |
|   |  | Bound carbon copy of "River Discharges - Present and Future" using gaging stations (Yuma and others), runoff data, storage needs for power and irrigation, Boulder, etc. No date, but has graphs dated 1924 in it.  |
|   | <b>Envelope</b><br>1924<br>Hubert Work<br>Reports<br>Mar 17 & 24<br>2 pieces | Memorandum for the Press from Dept of Interior, March 17, 1924 re "... the proposed Boulder Dam. Power plant with transmission lines, and the All-American Canal for supplying the Imperial Valley with irrigation water..." 16 pages   |
|   |  | Letter to Hon. Addison T. Smith, Chairman, Committee on Irrigation and Reclamation, House of Representatives, March 24, 1924, from John Weeks, Sec of War, Hubert Work, Sec of Interior, and Henry Wallace, Sec of Agric. Re Legislation H. R. 2903 - a bill "to provide for the protection and development of the lower Colorado River Basin". 8 pages |
|   | <b>Envelope</b><br>Miscellaneous<br>pieces<br>8 pieces &<br>printed items    | Graph, Colorado River at Topock 1884  |
|   |  | Table: Area and Water Use - Lower Colorado River. Yuma, April 1-1916. Over 20 areas, by District, including in Mexico with irrigable and irrigated acres, 1915 diversion in acre-feet. From USRS report Vol 732, Part 5 by L. M. Lawson.  |
| Bench Marks (elevations), Camp Mohave, Kingman, Mohave City, Needles Special, and Oatman Special Quadrangles and Gold Butte Quadrangle in Nevada ... and others. Many pages   |  |   |
| Memo to ECL from Bremman - Mojave River hydrograph with peak of 99,800 cfs (4/9/40). Several pages of ECL's computations.   |  |   |
| Copy of the legal agreement by the President of the Republic, Porfirio Diaz, President of the United States of Mexico, 17 <sup>th</sup> of May, 1904. Giving water and canal rights to carry water of Colorado River through Baja. Contract dated June 10, 1904. Certified correct translation by A. F. Andrade, Secretary of la Sociedad de Irrigacion y Terrenos de la Baja California, S. A. |  |   |
| Miscellaneous papers - e.g. legality of Congress being able to apportion waters   |  |   |

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|   | <b>Envelope</b><br>Maps -<br>Coachella<br>Valley, Salton<br>Sea, etc.   | North - South Profile Coachella Valley, Salton Sea, Imperial Valley and Colorado River Delta, May 1938. Shows water level elevation in Salton Sea in 1907 (fell when Colorado River diverted to Gulf), 1927 and 1938; and capacity at various levels and times if Colorado River should flow continuously into valley. 2 copies, May 13, 1938.<br>Another, similar Profile by LaRue & Jakobsen |
| <b>4</b><br>1923<br>1927<br>1938<br>Lee's Ferry Project<br>15 pieces  | Loose<br>4 pieces   | “Geologic Considerations Relative to a Proposed High Dam at the “Bridge Site” on Colorado River, about Five Miles Below Lee’s Ferry, Arizona” by Raymond C. Moore, no date. Study done by author and ECL in July/August 1923   |
|   |   | Letter to ECL from C. L. Patterson (Colorado Water Conservation Board) dated Dec 23, 1938 and ECL’s reply, Dec 30, 1938 re Merriell’s study. With copy of “Study of the Ultimate Depletion of the Colorado River at Lee’s Ferry” by Frank Merriell, May 11, 1937, prepared by Colorado Water Conservation Board.   |
|   |   | Graph and hand written calculations  |
|   |   | 1 page. “Junction reservoir site”, no date. Dam site on main stem of Colorado River a little below junction of Green and Grand and submerging the canyons of these latter two streams for 100 miles or so for storage of 8,000,000 acre-feet. This site abandoned and on Dec 30, 1914 suggested that this be withdrawn   |
|   | <b>Envelope</b><br>1923<br>1927<br>Diamond Core<br>Drilling at<br>Lee’s Ferry<br>Dam Site<br>10 pieces &<br>clippings | Laboratory Certificate - Smith Emery Co  |
|   |   | “Report on Core Drilling Lees Ferry Dam Site - Colorado River March 1, 1923”, Southern California Edison Co, Los Angeles. Includes location map and cross section drawings   |
|   |   | March 2, 1923 Letter to G. C. Ward from H. W. Dennis, construction Engineer with summary of core drilling results. Attached are drilling records and results   |
|   |   | Letters to ECL: Dec 9, 1924 from H. W. Dennis and Dec. 20, 1924 from G. C. Ward, both in reply to ECL’s letter of Dec 4 <sup>th</sup> which asked for this information   |
|   |   | Letter to ECL from H. W. Dennis, Sept 19, 1927, re costs of core drilling and ECL’s reply.   |
|   |   | Drawing of “Sections at Middle Black Canyon Damsite”, Dec 5, 1924  |
| Three newspaper clippings from Los Angeles Times: Jan 2 (no year) “Colorado River Control”; Jan 3, (no year) “Arizona Plans Exact Surveys”; and 1925 (Sat morning) “Death of Swing Bill Forecast” (El Centro, Jan. 2) |   |  |

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| <b>5</b><br>1927<br>Marble Gorge Dam<br>Site Report<br>3 copies + maps etc. | 2 bound<br>typewritten<br>copies | “Report on Marble Gorge Dam Site (Glen Canyon Reservoir Site) Colorado River Arizona” by LaRue and Jakobsen, Consulting Engineers, Los Angeles. August 1927. Report is on their field investigations for the Colorado River Commission of Arizona which was requested June 23, 1927. Letter to Hon. Geo. W. P. Hunt, Chairman, August 5 <sup>th</sup> , 1927. Has maps, drawings and photos |
|   | <b>Envelope</b>                  | Draft of Report on Marble Gorge Dam site...., without drawings and plates   |
|   |                                  | Memorandum on dam sites on Colorado River between Paria River and Grand Wash (mileages are distance from Paria River measured on Echo Cliffs Sheet): Badger Creek site, mid-section of Marble Canyon. On Vishnu quadrangle: Lava Canyon site, Mineral Canyon site plus many more  |
|   |                                  | Large map Profiles Lees Ferry to Black Canyon   |
|   |                                  | Plate XXIII from Water-Supply Paper 556. “Map and Cross Section of Marble Gorge Bridge Site, 5 miles below Lees Ferry”  |

**BOX 6 Other projects (listed by states)**

**Arizona**

Finding Aid states:

| Box 6 Other projects (listed by states)   | No. of Pieces |
|---|---------------|
| Arizona   |               |
| Report for Arizona Engineering Commission on Reconnaissance Investigation of Arizona Irrigable from the Colorado River, 1922-1923 |               |
| Buttes Reservoir and Irrigation Project, 1928   |               |
| Date Creek, 1932  |               |
| Hassayampa River, 1938  |               |
| San Juan River, 1915-1926   |               |

*ACCESSED 20 February, 2008 DIANE LARUE (DLR)*

DLR Summary

| FOLDER NO.  | PIECE  | SELECTED CONTENTS   |
|---|--|---|
| <b>1</b><br>Parker<br>Gila Project<br><br>12 pieces   | <b>Envelope 1</b><br>Hard bound, typewritten with drawings | “Report Based on Reconnaissance Investigation of Arizona Land Irrigable from the Colorado River”<br>Arizona Engineering Commission<br>1922-23   |
|   | <b>Envelope 2</b><br>Hand written notes in table form on:  | - Arizona Highline Canal Project - Irrigable lands<br>- Arizona Lowline Canal Project - Irrigable lands<br>- Mileage and Classification on Highline with station numbers -<br>Mileage and Classification on Highline Branches<br>- Continuous Mileage from Williams River Dam to Tunnel through Gila Mountains<br>- Acreage under LowLine-Dome Syphon |
|   | <b>Envelope 3</b>  | Draft copies for report, 8 pieces   |
|   | <b>Envelope 4</b>  | Draft tables (10 pieces)  |
|   | <b>Envelope 5</b>  | Draft tables - hand written, typed  |
| <b>2</b><br>1928<br>Arizona. Butte’s<br>Reservoir and Irrigation<br>Project<br>3 pieces (+ photos & charts) | Letter<br>September 24, 1928                               | From ECL to William A. Johnson, President, Western Pipe Co. Of Los Angeles regarding report on proposal to irrigate some 40,000 acres of land near Magma, Arizona by utilizing Butte’s reservoir site on Gila River.  |
|   | “Extract from Report on San Carlos Project, Arizona        | “Spill at Florence Diversion Dam due to Run-off below San Carlos Reservoir” by C. C. Fisher, USRS, 1920   |
|   | Letters Sept 1928  | Letters Sept 21, 1928 from W.E.Dickins, Tucson to ECL and Letter Sept 24, 1928 From ECL to W.E. Dickinson<br>Unpublished records showing flow of the Gila River at Kelven and San Carlos and the San Pedro river at Fairbank.   |
|   |  | Handwritten chart of “Flow of Gila River in Acre-feet” from years 1911 through 1927   |
|   | <b>Envelope of photos</b>                                  | B&W Prints and negatives, some pasted together to provide panorama view<br>no captions or labels or any indication of where or when taken<br>River, with little water - but shows riparian and desert vegetation  |

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| <b>3</b><br>1932 & 1940<br>Date Creek, Arizona<br>observation 3 pieces,<br>maps and charts | Letters, Sept 1932                                  | - To ECL from WE Dickinson re Date Creek irrigation development involving Alamo Dam and reservoir<br>- To J. A. Law from ECL re Date Creek project: Preliminary conclusions   |
|  | Envelope  | One print and several negatives   |
|  | Blueprints  | Damsite, Date Creek<br>Williams River with water measurements, run-offs, original dam site  |
|  | Map   | Portion of Western Arizona shows highways and the Stene Short Cut between Phoenix and Needles. Stene Consolidated Copper Co   |
|  | Document  | Chapter 102 Session Laws of Arizona - 1929, House Bill No. 188 An Act (Providing for the supervision and regulation of dams, reservoirs and appurtenances, and electrical and irrigation districts projects....   |
|  | Envelope  | 3 topographical maps Date Creek area (same, but one has Lower Kirkland Valley colored in)   |
|  | Paper   | "Application of the Theory to the Pulsating Flow Observed During the Flood in Devore Wash, Arizona at U.S. Highway 60 About 2:30 pm July 17, 1940 by E.J. Bednarski - many engineering calculations   |
| <b>4</b><br>1938<br>Hassayampa River,<br>Arizona<br>1 piece                                | Photographic scrapbook                              | Preliminary Examination Report - Flood Control, Hassayampa River, Arizona, Photographs. U.S. Engineer Office, Los Angeles, California, to accompany Report Dated January 20, 1938   |
| <b>5</b><br>1915 - 1926<br>San Juan River  | <b>Env. 1</b><br>1915                               | Extract from report of F. L. Sellev, project engineer to F. W. Hanna, supervising engineer, USRS, Phoenix. Jan 22, 1915 on San Juan River   |
|  | <b>Env. 2</b>                                       | Dam Sites along San Juan River, Southeastern Utah. 36 pages, carbon copy. "By Miser" is hand written on first page  |
|  | <b>Env. 3</b><br>San Juan Basin                     | Most of a very extensive report (typewritten, some hand written) by ECL including topography and climate, prehistoric ruins and natural wonders, water supply, Animas River, Pine River Basin sites and Emerald Lake and other reservoirs, plus lots of other sites.  |
|  | <b>Env. 4</b>                                       | "Water Powers of San Juan River" by ECL. "Synopsis of Report". Incomplete at 72 pages. Typewritten.   |
|  | <b>Env. 5</b>                                       | Township plats in Utah and New Mexico for San Juan Report   |
|  | <b>Env. 6</b><br>Miscellaneous Pieces and clippings | - Summary of meteorologic data for San Juan River Basin<br>- Handwritten account of 1879 exploration party under Elder Jens Nielsen to find, build wagon route into San Juan Country<br>- Newspaper clippings from San Juan Record, Monticello, Utah, August 1921.<br>- Account by Elwyn Blake on USGS expedition |

## BOX 7, Arizona (Continued)

Finding Aid states:

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| Box 7, Arizona (Continued)  | No. of Pieces |
| Little Colorado and Verde River Project for United Verde Copper C., 1917-1929 | 24            |
| Salt River Project, 1929  | 7             |
| Santa Cruz and Sonoita Rivers, 1937   | 1             |
| Virgin River Project  | 1             |

ACCESSED 26<sup>th</sup> February, 2008 DIANE LARUE (DLR)

DLR Summary

| FOLDER NO.   | PIECE  | SELECTED CONTENTS  |
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| <b>1</b><br>1917 - 1929<br>Little Colorado and Verde River Projects for United Verde Copper Co.<br>24 pieces | <b>Envelope</b><br>1928 June<br>1 piece  | "Report on the Hydro-electric Resources of the Verde District" by T. N. Moore, Clarkdale, Arizona, June 1928. Provided to C. R. Kuzell, Smelter superintendent, United Verde Copper Co.  |
|  | <b>No envelope</b><br>April - Sept<br>1929   | Many letters between several people, including LaRue & Jacobsen, with United Verde Copper Co, about power possibilities. Includes lots of blueprint drawings and sketches. LaRue & Jacobsen to do report for United Verde Copper Co. |
|  | <b>Envelope</b><br>1929<br>Aug 6   | Camp Verde Dam Site Geology, 2 maps  |
|  | <b>Envelope</b><br>Negatives<br>Verde River<br>1932  | 6 panoramic (5 x 10") of Verde River [DLR: prints might be in photo collection]  |
|  | <b>Envelope</b><br>May 23 - Sep<br>9<br>Little Colorado River Project and Verde River Report | 2 maps.<br>One is "Reservoirs Power Plants & Canal System ... to reclaim lands of the Paradise and Deer Valleys"<br>Drawn topographical map for Camp Verde Dam   |

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|  | <b>Envelope</b><br>1929<br>June-Aug<br>Little<br>Colorado<br>River Project<br>Report<br>1 piece | “Water Power Possibilities Little Colorado River Below Leupp, Arizona” by LaRue & Jakobsen. Aug 22, 1929. To C. R. Kuzell, Smelter Superintendent, United Verde Copper Co. .   |
|  | <b>Envelope</b><br>1929<br>July 19<br>1 piece   | Charts of river flow of the Little Colorado River at Grand Falls near Flagstaff and Moenkopi   |
|  | <b>Envelope</b><br>1929<br>Aug 16<br>2 blueprint<br>maps  | Only one map: Little Colorado River Amended Power Development  |
|  | <b>Envelope</b>   | Profile of Little Colorado showing Geological Formations   |
|  | <b>Envelope</b><br>1929<br>12 pieces  | Miscellaneous for Little Colorado River Project<br>Photos: several plates from Water-Supply Paper 556; Little Colorado River, May 1921.<br>Notebook with handwritten notes and drawings  |
|  | <b>Envelope</b><br>no date  | 2 copies of “Memorandum - Power Value of Little Colorado River”<br>Included is listing of Little Colorado Pictures: panorama pictures, A1, A2, B1, etc. with locations (but no photos).  |
| 1<br>1917  | <b>Envelope</b><br>should also be<br>in Folder 1  | “Report on Little Colorado River and Black River Power Projects” by Frank G. Baum, Oct 22, 1917. Also blueprint maps and charts.   |
| <b>2</b><br>1929<br>Salt River Project<br>7 pieces   | <b>Envelope</b>   | Letter to ECL from J. H. Gardiner for W. E. Dickinson, USGS, Tucson to ECL, July 10, 1929. With discharge data for Chrysotile, Arizona from Oct 1, 1927 to June 30, 1929, as requested.  |
|  |   | Exhibit graph to accompany “Application for License for John L. Fish for Power Sites on Salt River”  |
|  |   | Assorted charts  |
|  |   | 4 page manuscript, no author, no date on development of hydro-power in Arizona   |
| <b>3</b><br>1937<br>Nov 29<br>Los Angeles<br>1 piece |   | Scrapbook of mounted photographs to accompany “Preliminary Examination Report Santa Cruz and Sonoita Rivers, Sant Cruz County, Arizona”. November 29, 1937. U. S. Engineer Office, Los Angeles<br>Lists several proposed dam sites with photos and dam lines sketched in. Photos taken 9/21 or 9/23/1937 |

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| <b>4</b><br>1924<br>Nevada and<br>Arizona<br>Virgin River Project<br>1 report |  | “Preliminary Report on the Holdings of the Virgin River Development Company” Submitted to M. B. Dudley, President, By J. Mos. Ruthraufe, Registered Professional Engineer. Tucson, 1924. |
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## BOX 8, California

Finding Aid states:

| Box 8, California   | No. of Pieces |
|---|---------------|
| Los Angeles County, miscellaneous reports, etc., 1927 -1936 | 5             |
| Merced Irrigation District, 1912 & 1920                     | 15            |
| Owens Valley, 1930  | 6             |
| Pit River and Fall River Projects, 1912 & 1920              | 2             |
| Santa Maria River, 1937                                     | 2             |
| Ventura River, 1938   | 1             |

ACCESSED 27<sup>th</sup> February, 2008 DIANE LARUE (DLR)

DLR Summary

| FOLDER NO.  | PIECE   | SELECTED CONTENTS   |
|---|---|---|
| <b>1</b><br>1927 - 1936<br>Misc. Reports, charts,<br>etc. re water, flood<br>control, etc. in Los<br>Angeles County and<br>Orange Co.<br>5 pieces | 1 Report  | San Francis Dam Failure by ECL with handwritten field notes and mounted photographs   |
|   | <b>Envelope</b><br>1927 -1929<br>San Gabriel<br>River | “Report on San Gabriel Investigation” Mar 22, 1927. Information for pending applications for Division of Water Right involving appropriations from San Gabriel River. Sacramento.<br><br>“Pasadena - \$10,000,000 Water Bonds, for June 18, 1929 election Memorandum: Build dam at Pine Canyon site in San Gabriel Canyon, 4 miles below Los Angeles County Flood Control dam, now under construction. Height to be 370 feet, which is higher than the highest dam in the world. And many other points on distribution and costs. |

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|---|--|---|
|   | <p><b>Envelope</b><br/>1935<br/>Run-off from<br/>Experimental<br/>Plots<br/>3 pieces</p>                     | <p>Discussion by ECL of Report by Finley B. Lavery presented at Water Conservation Congress held under auspices of the Irrigation Division, Am. Soc. C. E., Los Angeles, March 13, 14, 1935.<br/>Several pages of rainfall intensity curves, discharge curves</p> <p>Large chart of Population growth for Pasadena and other data relevant to Pasadena</p>  |
|   | <p>Report in binder</p>  | <p>“Value of Water, Los Angeles and Orange Counties California”<br/>Prepared by ECL under direction of Major Theodore Wyman, Jr. District Engineer, U. S. Engineering Office, Los Angeles, Dec, 1936<br/>Discusses demand, costs, uses - domestic and agricultural</p>  |
| <p><b>2</b><br/>1920 - 1921<br/>Merced Irrigation<br/>District<br/>Miscellaneous<br/>Data<br/>15 pieces</p> | <p><b>Envelope</b><br/>Merced<br/>Irrigation<br/>District Report<br/>Miscellaneous<br/>Data<br/>8 pieces</p> | <p>Handwritten and typed reports, letters, notes (Profile Merced River)<br/>Getting water, building reservoirs, pumping from subsoil for drainage and pumping to irrigating canals, dam for hydroelectric power to operate the drainage pumps<br/>Various graphs<br/>Maps of Merced Irrigation District</p>   |
|   | <p><b>Envelope</b><br/>Merced<br/>Irrigation<br/>District Report<br/>Miscellaneous<br/>Data<br/>6 pieces</p> |   |
|   | <p>Hardbound<br/>and tied report</p>   | <p>“Report on Merced Irrigation District California” by E. C. La Rue, USGS, January 1921. 97 pages With illustrations.<br/>This report for information to determine if Merced Irrigation District could receive permit to develop power at Exchequer on Merced River.<br/>Discusses location, drainage basin, water power development, 5 power plants by private agencies...<br/>Study ordered by Grover<br/>Accompanying letters</p> |
| <p><b>3</b><br/>1930<br/>Owens Valley<br/>(California) Material<br/>6 pieces</p>                            | <p>Loose</p>   | <p>Report: Property of the Eaton Land &amp; Cattle Company - draft with many edits. Includes data on basis to estimate water consumed on Eaton Land: e.g. evaporation and plant transpiration from grass lands is 2 times the evaporation from an open water surface. 6 pages</p>   |
|   |  | <p>Report: Long Valley Reservoir Site<br/>Located in Mono County at head of Owens River Gorge, 62 miles by river above the intake of the Los Angeles Aqueduct. Discussion of this project, 3 pages And mentions H. A. Van Norman and Mulholland</p>   |

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|---|--|---|
|   | <b>Envelope</b><br>1929 - 1931<br>Notes re<br>Owen's Valley<br>and Los<br>Angeles Water<br>Supply<br>3 notebooks | ECL's notebooks with his hand written notes<br>1928 ; Nov 26, 1928 met with Koebig Sr. To discuss Owen's Valley<br><br>1929 Water supply, Owens's Valley - notes on supply, flow,<br>predicted needs for LA area water, Los Angeles Aqueduct;<br>computations and figuring  |
|   |  | 1931 Owen's Valley, etc. Owen's Valley Trip July 7, 1931- storage<br>capacities, profiles of several creeks in area   |
|   | <b>Envelope</b><br>1930<br>Inyo Chemical<br>Company Law<br>Suit  | Services and expenses for ECL<br>1 photo - #7 of 11/27/26 9:30 am aqueduct break<br>Daily Rainfall Records for Independence for years 1898 - 1926   |
| <b>4</b><br>1912 - 1920<br>Pit River and Fall<br>River Power Projects<br>(also map of McCloud<br>River)<br>2 pieces |  | "Water Power Report of the Pit River above Fall River and of Fall<br>River, California" by Geo. F. Holbrook, Assist Engineer USGS,<br>Pasadena, Calif. April 1920. 22 pages. Includes letter from ECL to<br>Grover, that he assigned Holbrook to do this report. ECL's<br>conclusions.<br><br>Map of McCloud River, Shasta County   |
| <b>5</b><br>1937<br>July - Sep<br>Santa Monica Calif.<br>Santa Maria River<br>(California)<br>2 pieces              | <b>Envelope</b><br>1936 -1937<br>Miscellaneous<br>notes re Santa<br>Maria River<br>1 vol                         | ECL's notes include research facts and quotes from Feb 1884 flood;<br>1884 flood destroyed all bridges on Los Angeles River.<br>Quotes from "History of Los Angeles" by Wm. A. Spaulding, 1931<br>Arizona<br>Orange County 8-2-36<br>People's names and contacts<br>Notes on several rivers in southern California<br>Santa Maria - list of things to do and reports to get - several pages |
|   | <b>Large<br/>notebook</b><br>Santa Maria<br>River<br>July, Aug.,<br>Sept. 1937<br>ECL                            | Handwritten notes:<br>7-16-37: Lippincott Reports<br>Santa Maria Valley:<br>Sisquor River at Round Corral<br>Santa Maria River Profile<br>Lots of calculations related to run-off, percolation, storage capacity,<br>waste land, reservoir sites etc.   |
| <b>6</b><br>1938<br>Ventura River<br>1 notebook   | <b>Envelope</b>  | Inside notebook: Outline for Flood Control Projects<br>Notebook has handwritten notes by ECL<br>List of 22 things: who to talk to, what to get, questions to be answered<br>Sketch Ventura River to Ocean with levee broken about 1000' south<br>of HW 101<br>Blank pages, then<br>Lists of photos taken, with locations  |

## **BOX 9**

Finding Aid states:

Box 9

|   |    |
|---|----|
| Colorado - Arkansas River Valley Project, 1913        | 1  |
| Idaho - Minidoka Power Plant, 1908-1911               | 7  |
| Oregon - Klamath Lake Projects, 1906-1920             | 30 |
| Utah - Power Resources for Salt Lake City, etc., 1914 | 1  |
| Monticello Wheat Lands, 1917                          | 1  |
| Mexico - Nogales (Sonora) Project, 1931               | 1  |

**Box 9 Not Accessed by DLR**