



The Gage Canal Company

Public Utilities Department

City Council
October 16, 2018

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Overview

1. History and timeline
2. Structure, purpose and impact
3. Friendly Condemnation
4. Condition and operations
5. Shares
6. Agreements

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References

1. Gage Canal Company Corporate Bylaws
2. Gage Canal Company Articles of Incorporation
3. Agreement For Operation Of Gage Canal Facilities
4. 1965 Judgement In Eminent Domain and Final Order of Condemnation
5. Creason's 1975 Report
6. Historic American Engineering Record, National Park Service
7. *A Citrus Legacy*, Joan H. Hall, 1992
8. 1965 Stipulation For Judgement In Eminent Domain and Final Order of Condemnation
9. Gage Water Exchange Agreement
10. Gage Canal Company staff
11. Water Rule 16
12. Letter to Gage Shareholders from Gage Legal Counsel

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Matthew Gage⁶

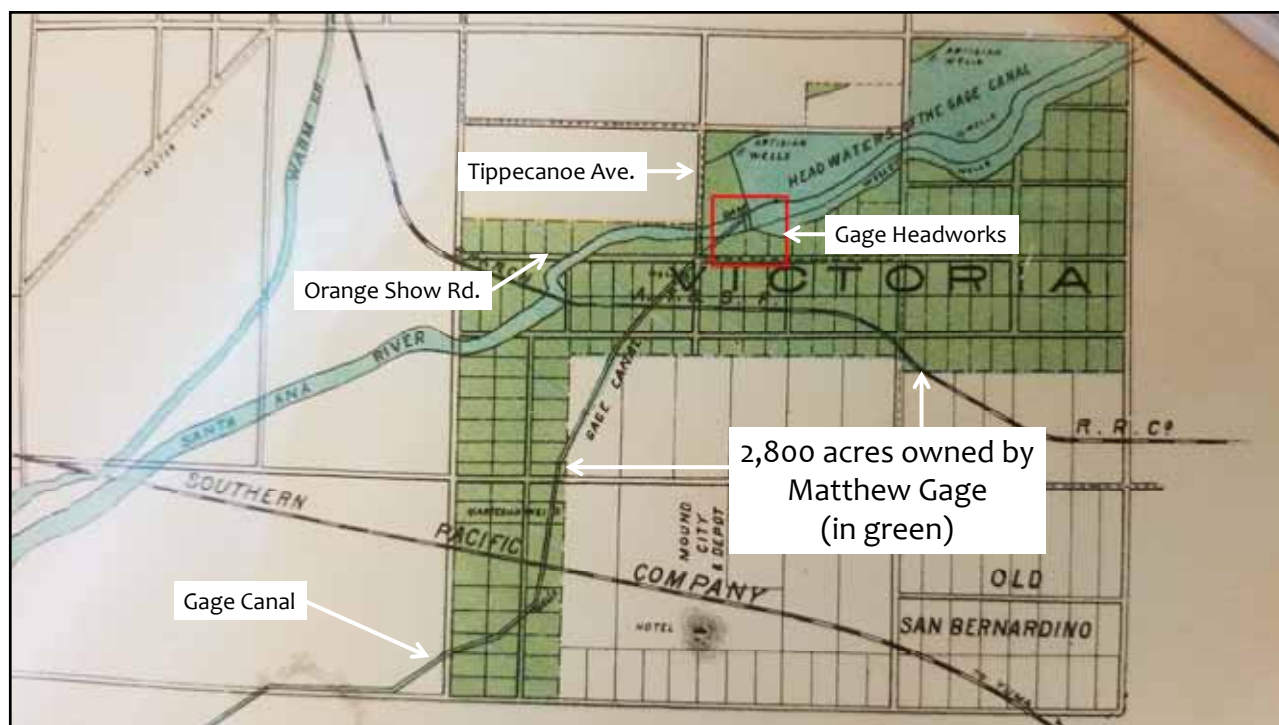
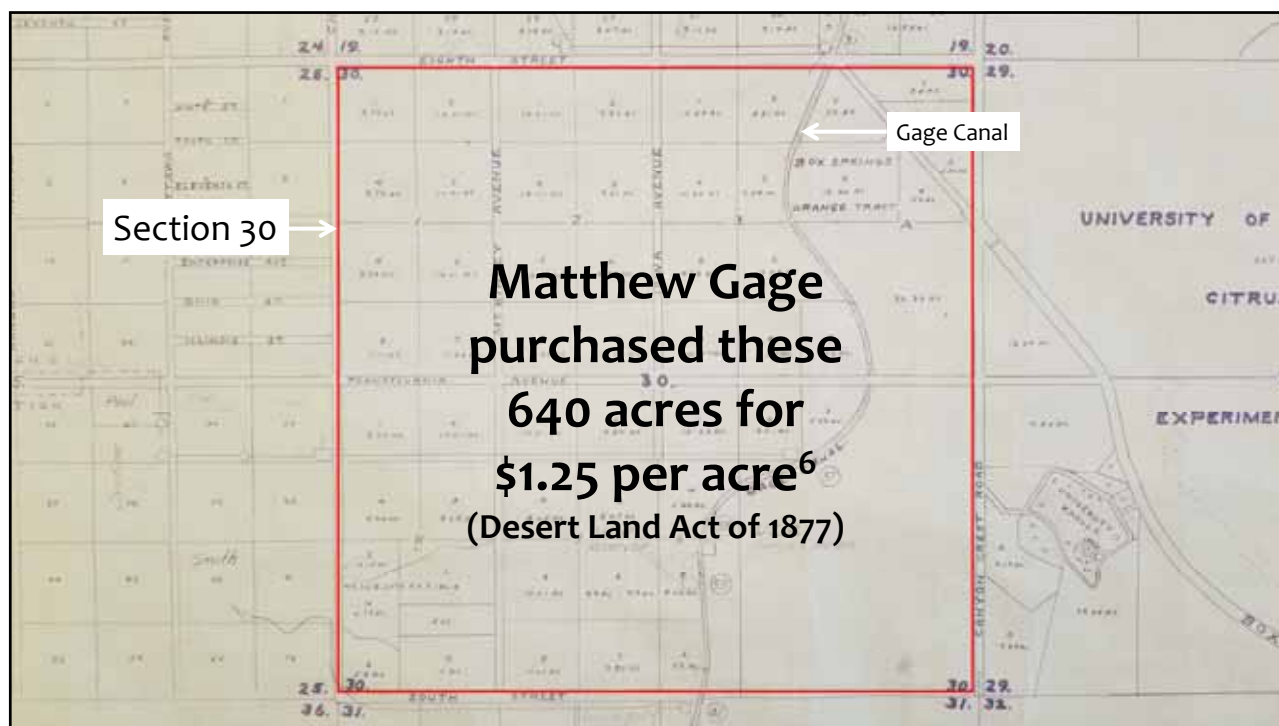
1. Arrived in 1881
 - a. Watchmaker and jeweler
2. Obtained land
 - a. 640 acres (Section 30 – UCR)
 - b. Three years to find water
 - c. Unable to develop local water supply
 - d. 2,800 acres (SB near SAR)



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3. Planned out project

- a. Located suitable diversion spot
- b. Near SBDO Airport
- c. 2 feet/mile slope for flow

4. Found investors

- a. \$100/acre investment
- b. 1 inch water per 5 acres
- c. Iowa Syndicate



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5. Began Construction

- a. SB to Tequisquite Arroyo
- b. Several flumes and tunnels
- c. "Herculean Task"

6. Canal Expansion

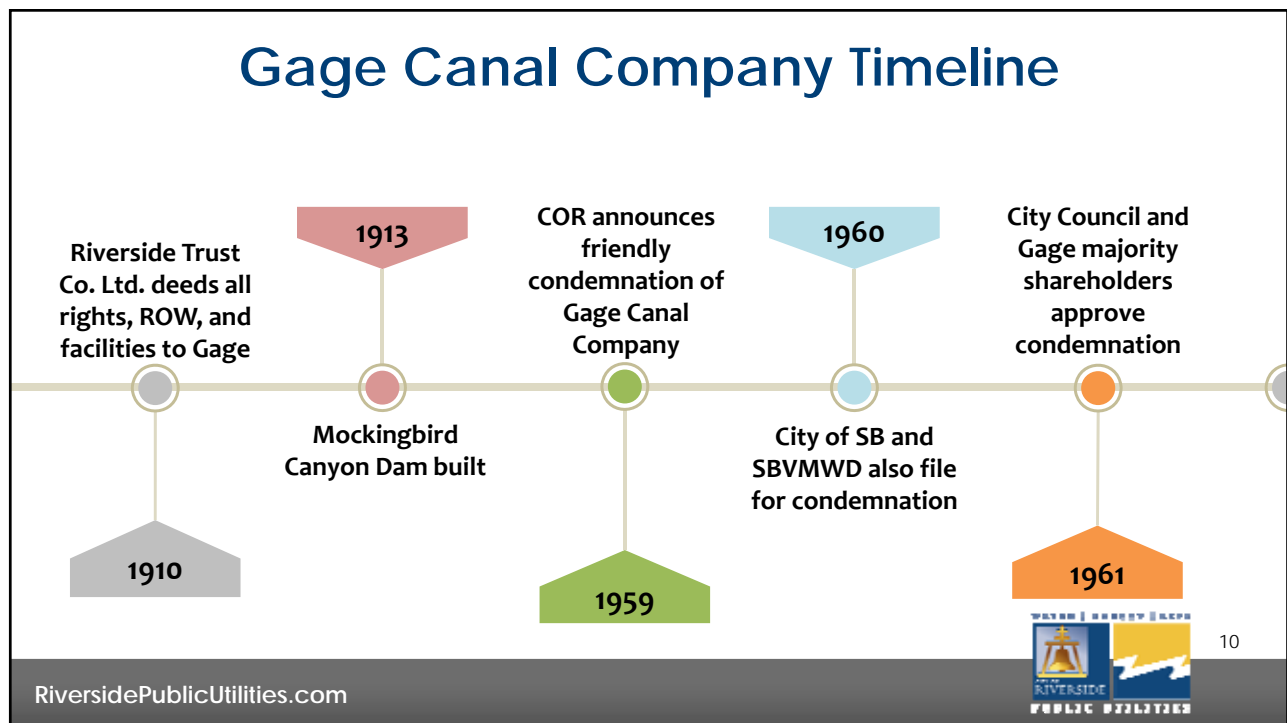
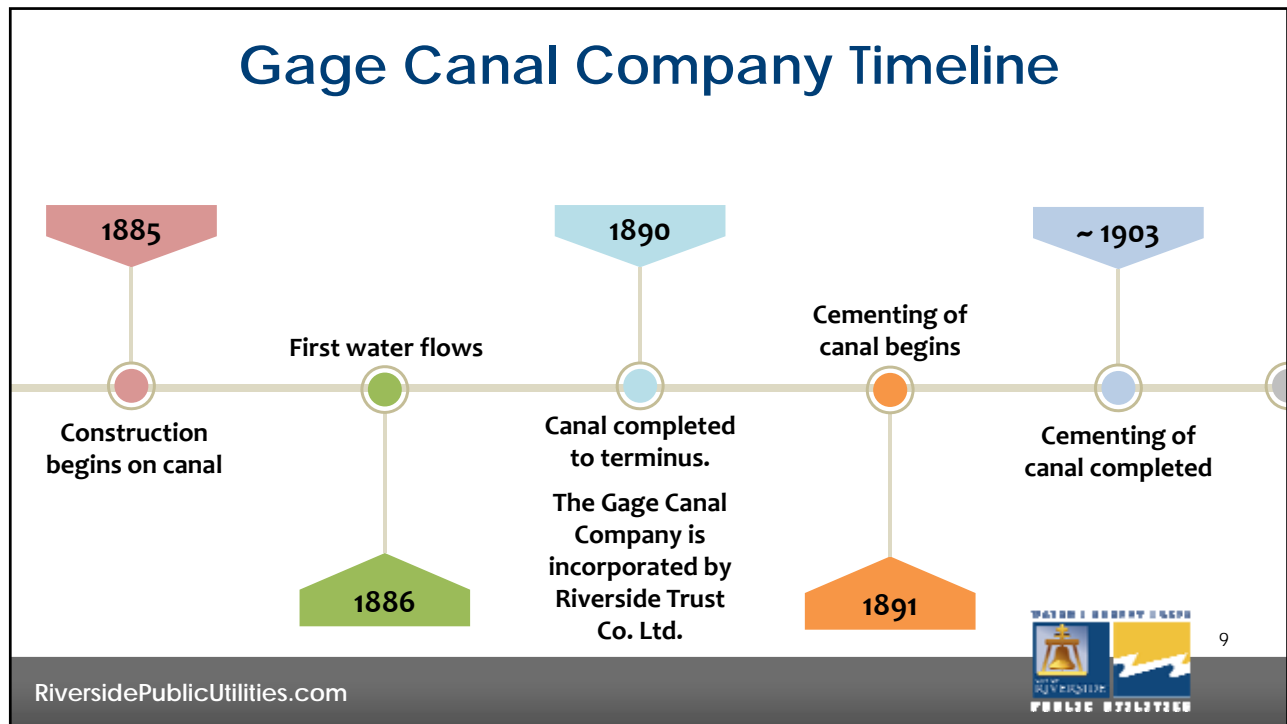
- a. British investors
- b. Tequisquite Arroyo to Arlington Heights

7. Became president of Gage Co.

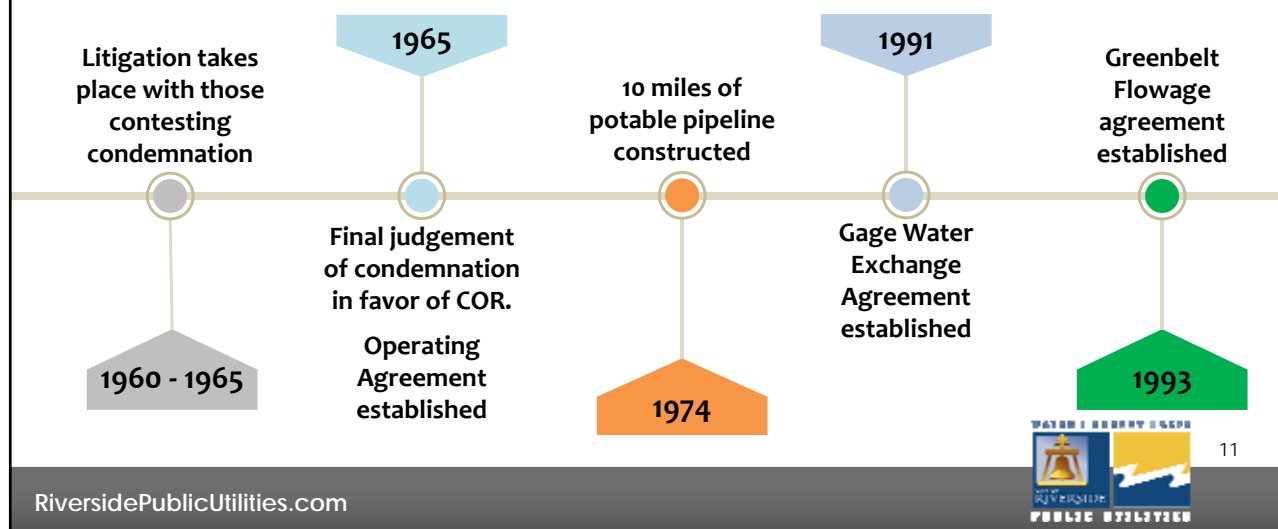


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Gage Canal Company Timeline



Corporate Structure¹

1. Incorporated 1890
 - a. California private non-profit¹²
 - b. Articles of Incorporation and Corporate bylaws
 - c. Eleven Directors with General Manager
2. Irrigation water supplier
3. \$2.5M initial capital valuation
 - a. 50,000 shares @ \$50 par

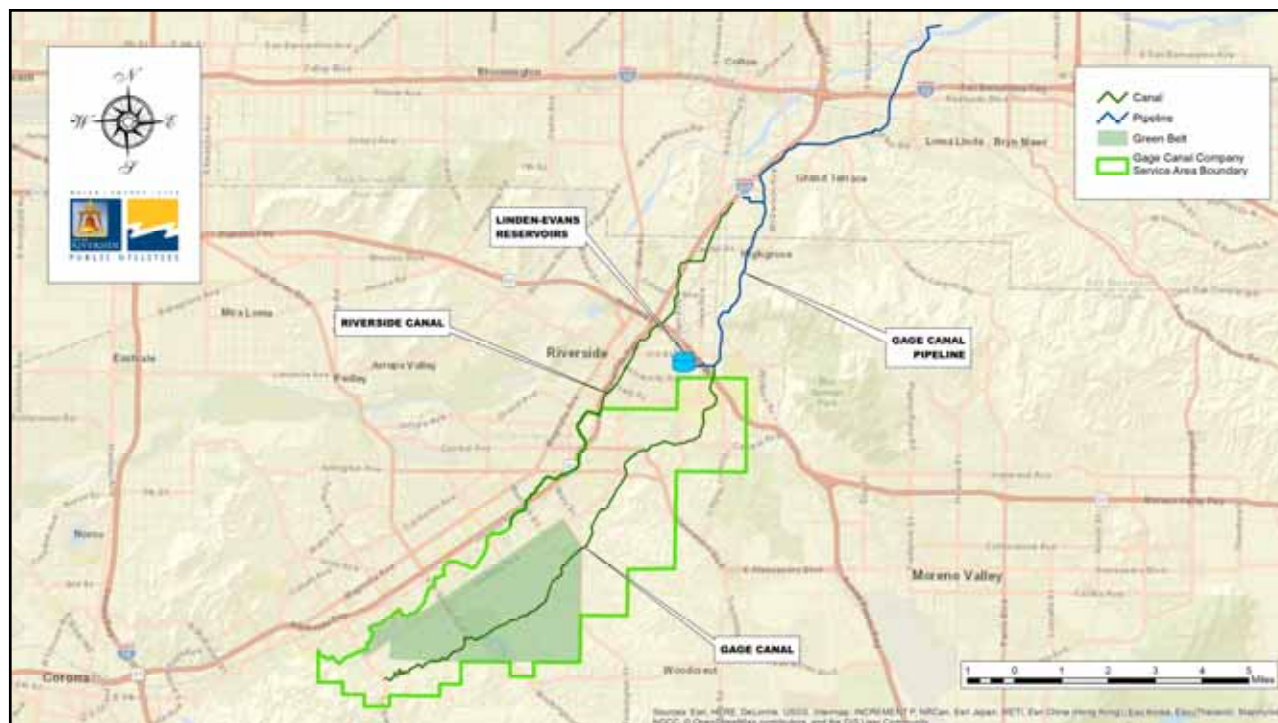
Purpose of Company

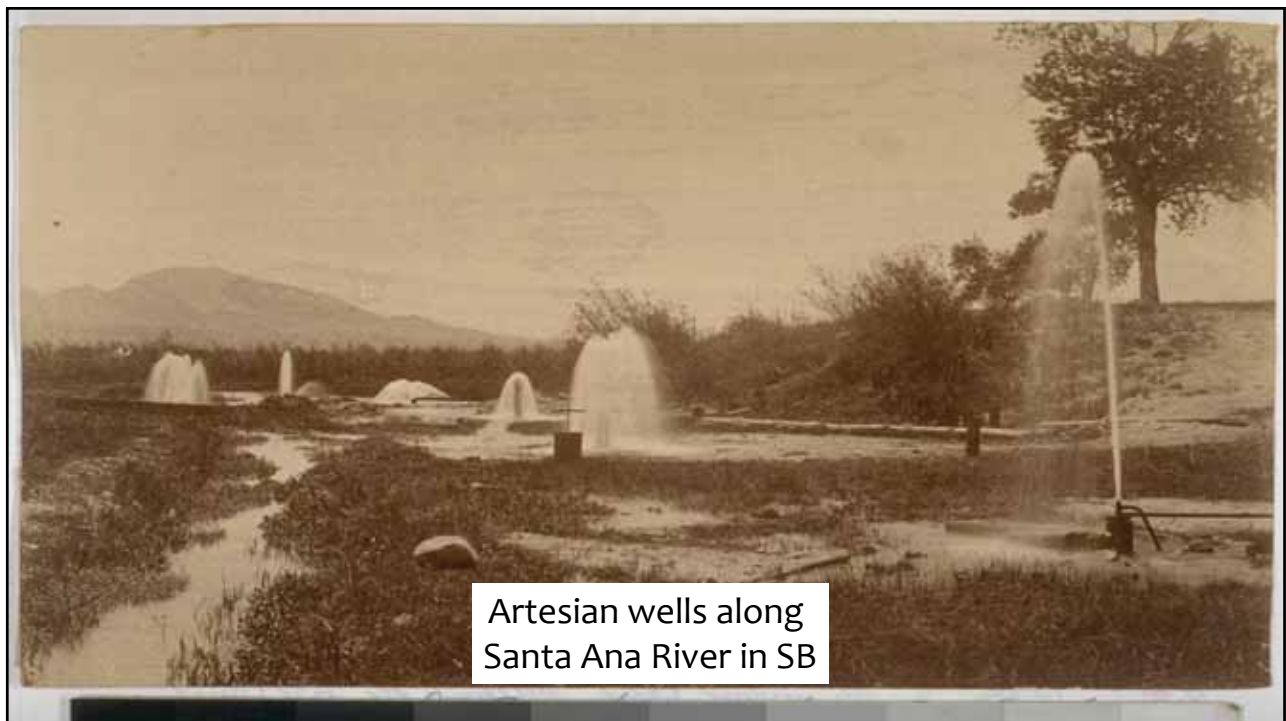
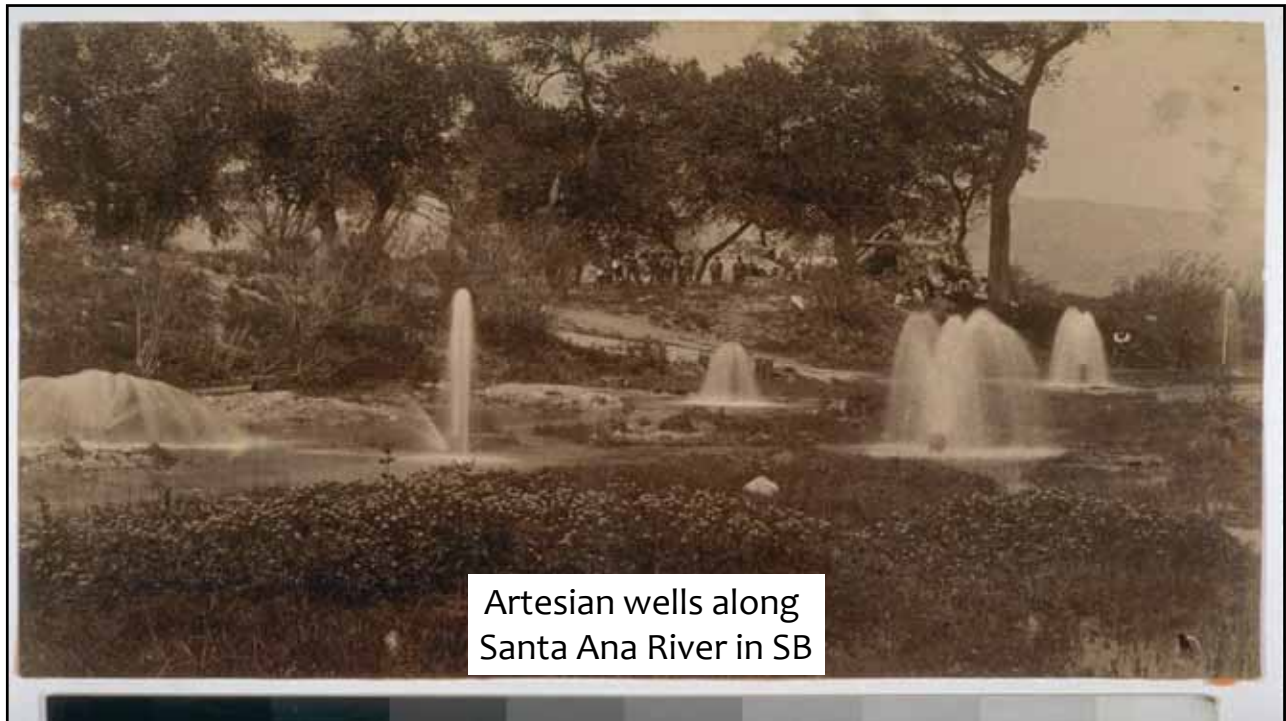
1. Provide irrigation water to East Riverside, Section 30, Arlington Heights
2. Production side
 - a. River diversions and wells
 - b. Canal, flumes and tunnels
3. Delivery side
 - a. Canal, weirs and pipelines
 - b. Mockingbird Dam

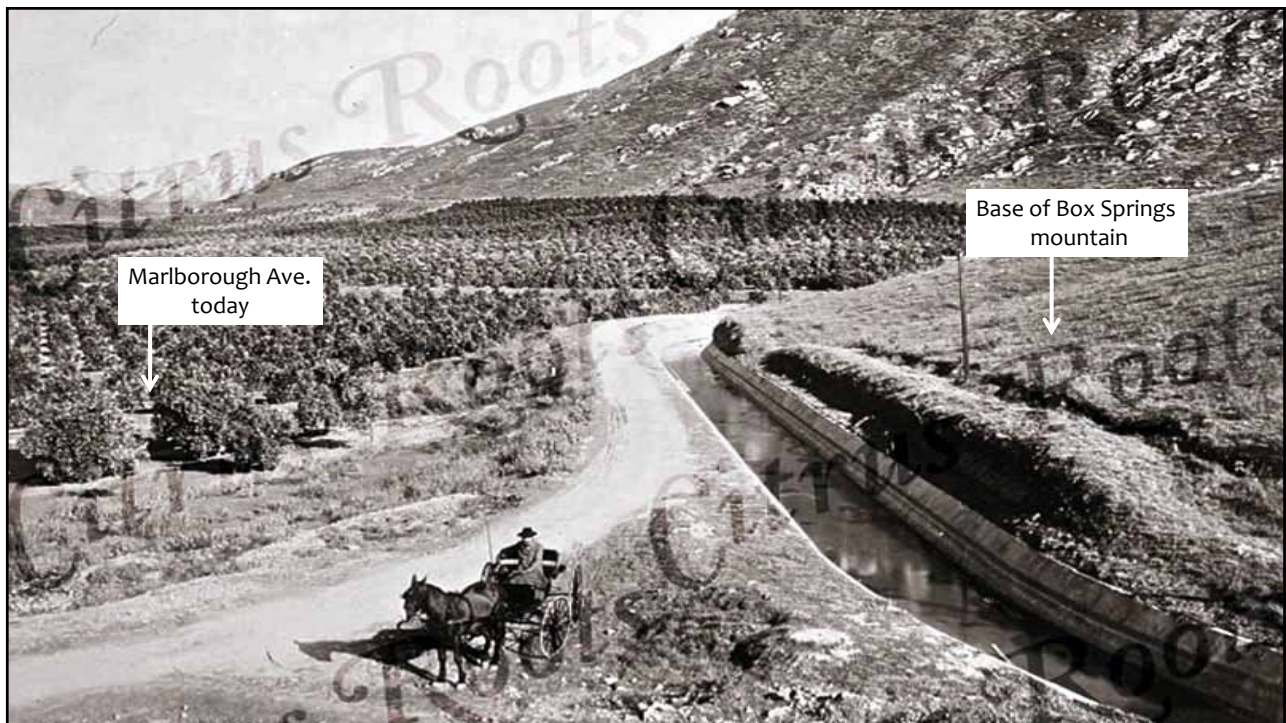
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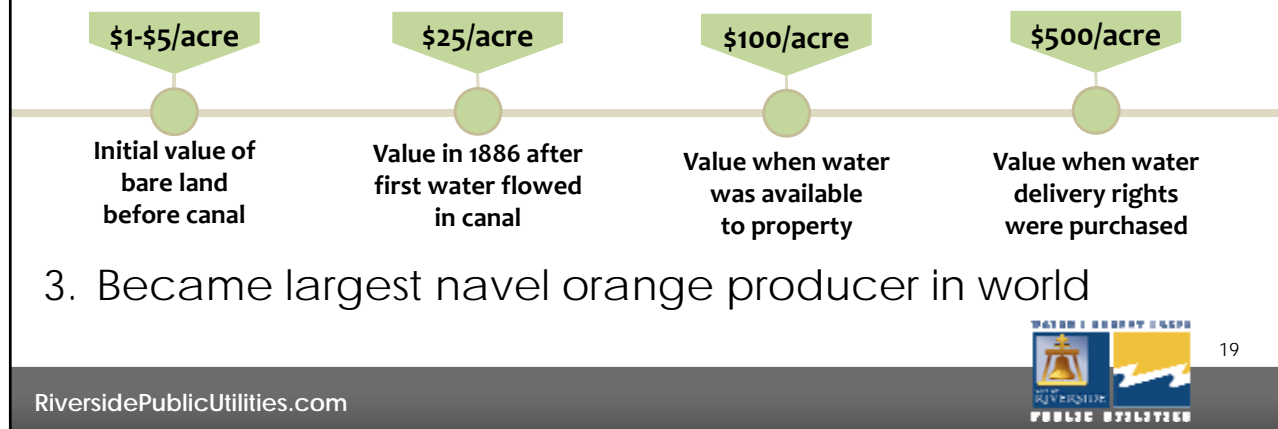


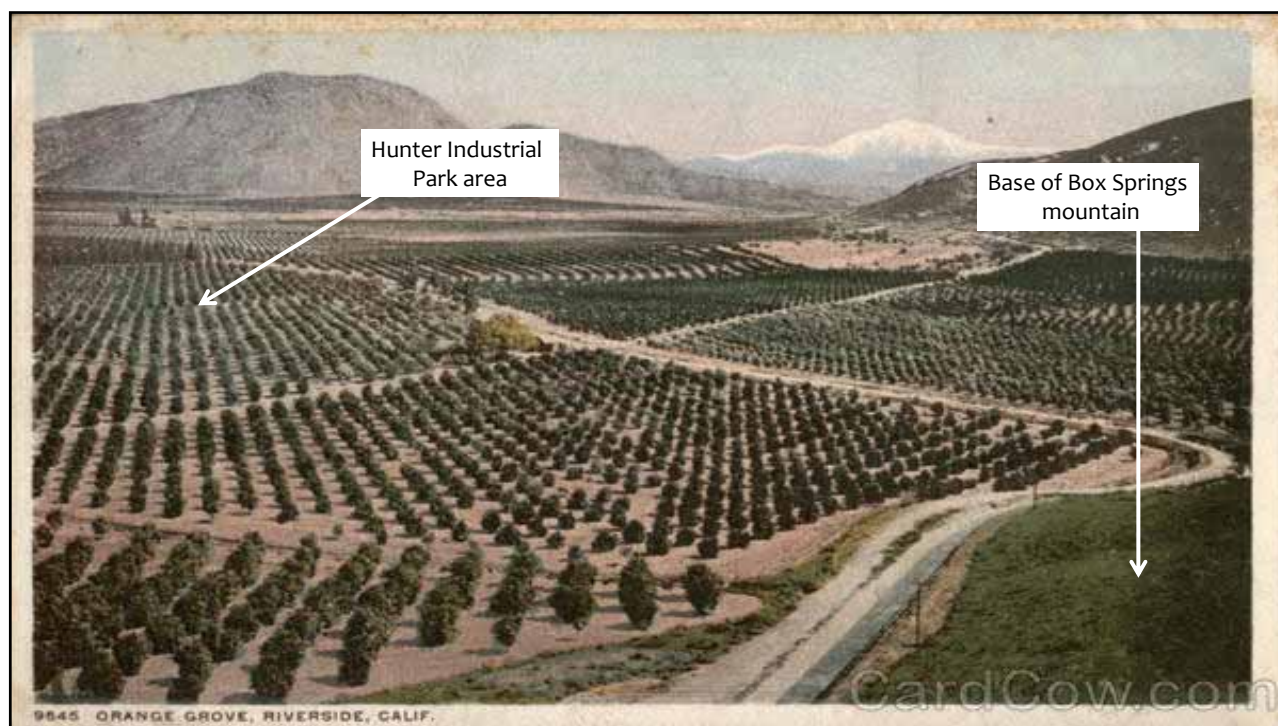




Impacts on Riverside

1. Opened large areas for development
2. Spurred land boom with value added to lands⁷





Friendly Condemnation

1. Inland Empire population growth
 - a. San Bernardino agencies acquire stock
 - b. COR "friendly condemnation" in 1959
 - c. SBDO entities follow suit in 1960
2. 1965 Judgment and Stipulation
 - a. In favor of COR
 - b. For "*greatest public good*⁸"
 - c. For "*necessary public use*⁴" of water

Friendly Condemnation

3. Acquisition

- a. Water rights, infrastructure, property
- b. Three properties and tail end delivery excluded

4. Cost

- a. City paid \$547,277 to Gage⁸
- b. Fixed assets recorded to Water Fund



Friendly Condemnation

5. Stock

- a. 14,055 shares
- b. Shares were not condemned
 - 1. Valued at \$400/share (\$225 up front (option), \$175 when surrendered)

6. Operating Agreement

- a. Gage operates system as independent contractor³
- b. City not to interfere
- c. Ensure irrigation water deliveries continue



Friendly Condemnation

7. Excess production

a. City can take excess production capacity³

1. Up to basin right
2. At cost of production

8. Amendments

a. Mostly COR assuming maintenance obligations

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Gage Canal Condition

1. ~ 20 total miles of transmission system

- a. ~ 10 miles of pipeline
- b. ~ 7 miles of open canal
- c. ~ 3 miles covered canal

2. Canal maintained by Gage

3. Very high reliability

4. Most has been re-lined

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Gage Canal Operations

1. Capacity

- a. ~ 3,000 MID total capacity
- b. ~ 2,000 MID (67%) normal operation

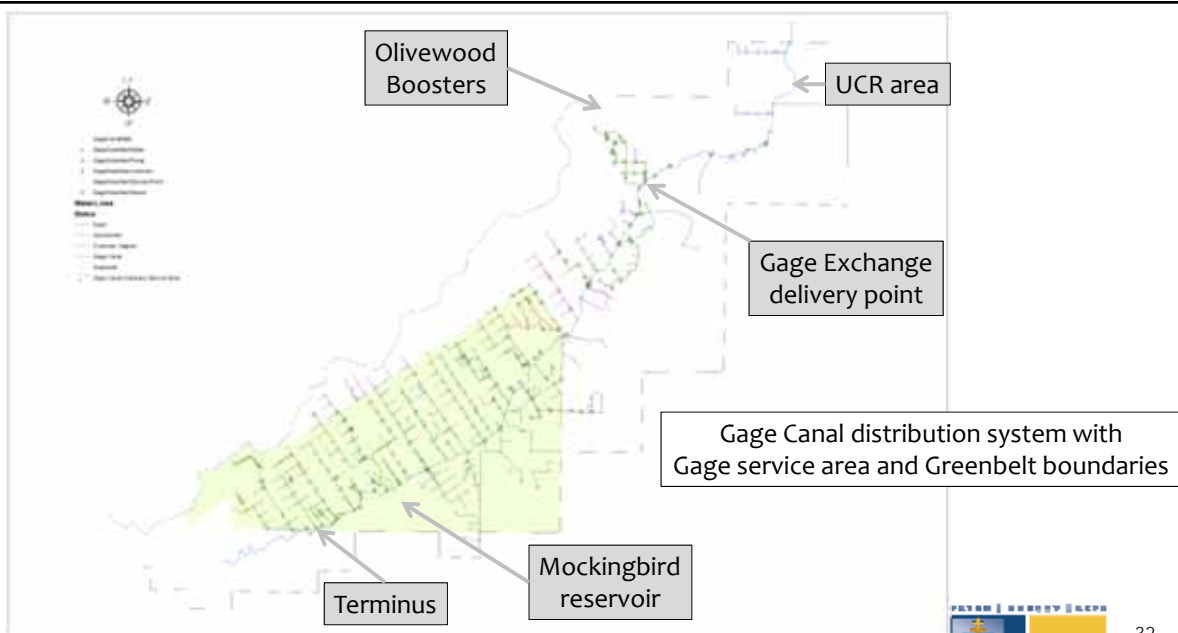
2. Water Quality

- a. High quality water due to treatment and pressurized pipe
 - 1. Requires blending to become potable
- b. Lower quality in open canal
 - 1. Suitable for irrigation



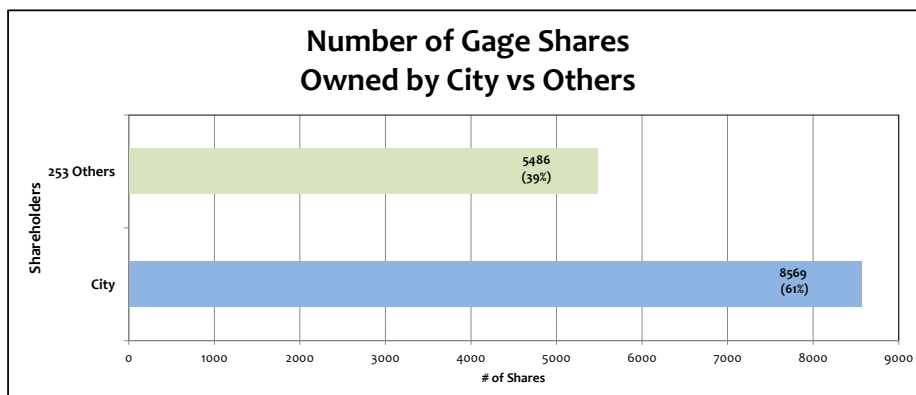
Distribution Infrastructure

1. Maintained by Gage up to last delivery point
 - a. Thereafter customer's responsibility
 - b. Non-pressure rated pipes
 - c. 30-40% damaged or abandoned
2. A few pump companies
 - a. Deliver canal water above canal elevation



Outstanding Shares of Stock

1. 14,055 shares, 254 shareholders



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Outstanding Shares of Stock

2. City holds 8,569 shares (61%)

a. Not traditional "shareholder" in terms of irrigation delivery³



3. Remaining 5,486 shares (39%)

a. 6 shareholders holding 1% - 4% total shares

b. 247 shareholders holding < 1% total shares

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Issuance of Stock

1. Originally issued at 2 shares per acre
2. Secured **water delivery right** appurtenant to property³
3. No new shares can be added or issued (Section 6)³
4. Gage must inform City of changes or transfers³
5. Subdivision and lot splits create complications



Conveyance of Shares

1. Governed by Water Rule 16 (1991)
2. Can transfer to new owners through escrow
3. Can be turned into City for \$175 payment
4. Can become "abandoned"
5. Excess shares can convert to "Contract"
 - a. Requires City approval
 - b. City gets shares but not entitlement



Share Assessment

1. Annual "Water Tax" each shareholder pays
2. City pays proportionately
3. 14,055 x per share cost = revenue for Gage
4. If not paid, shares encumbered by City
5. Cost of water ~ \$82 per acre foot

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Shareholder Deliveries

1. Scheduling¹⁰
 - a. Two large deliveries per month, 15 days apart
 - b. Made over two 48 hour periods
2. Volumes
 - a. 1 share = 4.5 Miners Inch Day (MID) per month
 - b. 1 share = 51,840 gals per month
 - c. 14,055 shares = 30,184 AFY total delivery obligation
 1. Presently, about 12,000 AFY irrigation obligation

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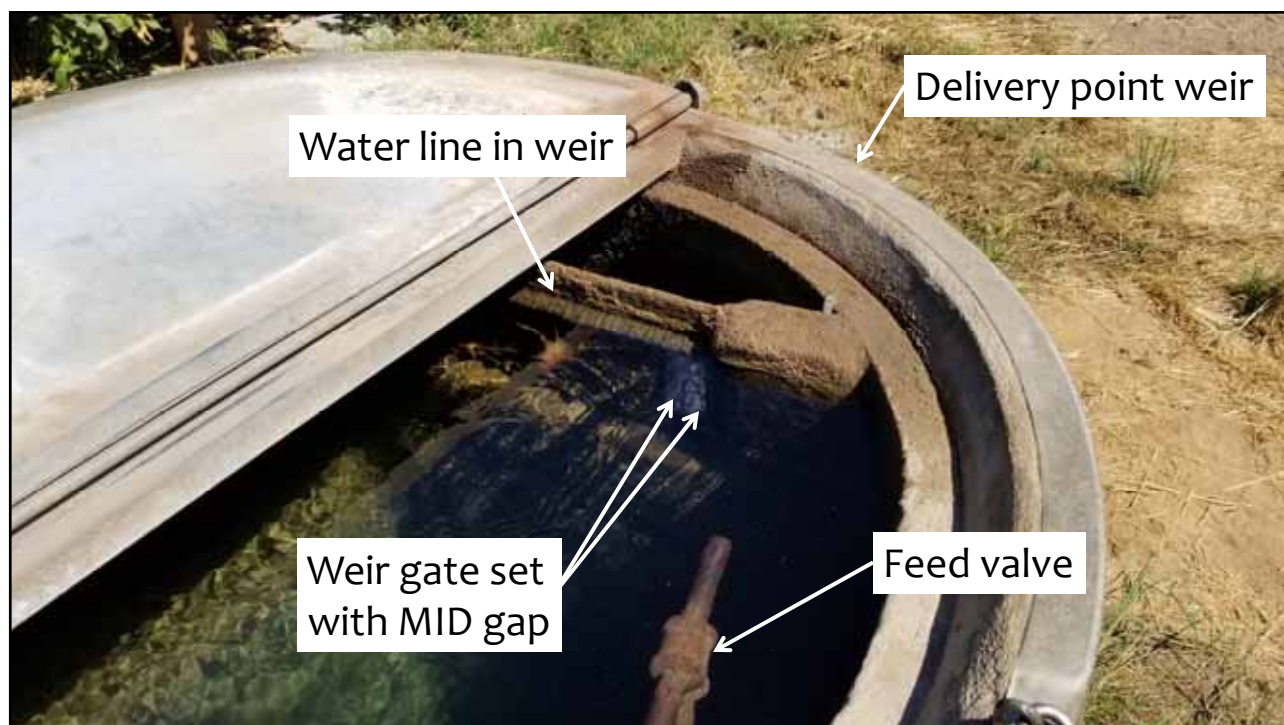
Shareholder Deliveries

3. Challenges¹⁰

- a. Designed for flood irrigation
 - 1. Suitable for old citrus industry, but not modern farming
 - 2. Gage can reduce deliveries if customers waste water¹
 - 3. Lack of knowledgeable growers complicate matters
- b. Antiquated measurement method
 - 1. Not an exact science
 - 2. Difficult to serve lots smaller than 5-acres
- c. Nurseries create exceptions



Miner's Inch Weir Gate





Extra Water to Shareholders

1. Shareholders can request "extra water"
 - a. Significant cost increase
 - b. Initial delivery entitlement = \$3.50 per MID
 - c. First extra 80% of entitlement = \$7.50 per MID
 - d. Beyond extra 80% = \$15 per MID

1991 Gage Water Exchange Agreement ⁹

1. In the midst of 1987-1992 drought
 - a. City more reliant on imported water
 - b. Underutilized Riverside Canal (& irrigation wells)
2. Exchange Riverside Canal water for Gage Canal water
 - a. 1 to 1.25 ratio
 - b. Up to 6,400 AFY potable to City for 8,000 AFY non-potable to Gage
3. Riverside canal water subject to water quality requirements
 - a. Samples are taken every 6 months

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1993 Greenbelt Flowage Agreement (WA-8)

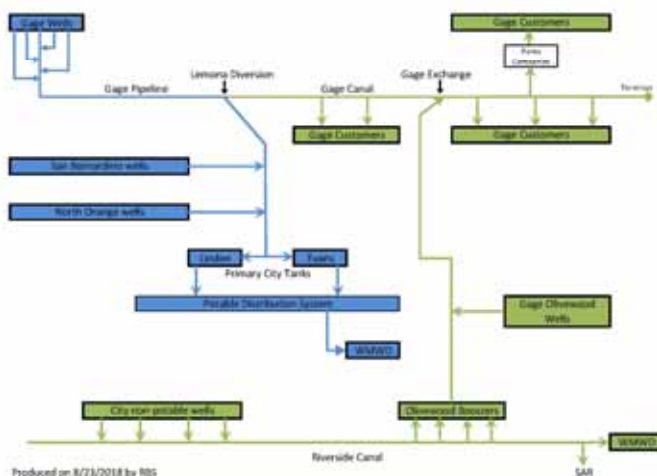
1. Provides access to Gage Canal water
 - a. Lot within Gage service area
 - b. Access to Gage Canal infrastructure
 - c. At owner's expense
 - d. Utilizes portion of City's share entitlement
2. Gage delivers water, notifies City
3. City bills customer

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How Gage System Works with RPU System



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Recommendations

That the City Council receive and file this report.