Resource Conservation and Resilience
CHAPTER 7 OBJECTIVE

Objective RC-1: Make efficient use of existing and future public infrastructure.

IMPLEMENTING POLICIES

RC-1-a: Setting Service Standards
RC-1-b: Capital Improvement Program
RC-1-c: Prioritize Revenues
RC-1-d: Coordinate Public Construction
RC-1-e: Dig Once
RC-1-f: Telecommunications Strategy
RC-1-g: Grant Funding
RC-1-h: Public-Private Partnerships
## Accomplishments:

- Wastewater is measured by capacity of sewer lines
  - Investment pursued when capacity gets to 80%
- Waster set and monitored to specific pressures throughout water system avoiding interruptions
- Waste is picked up as scheduled
- City maintains annual CIP for all City managed utilities
- City and County have monthly coordination meeting
- City hosts quarterly utilities meetings
- City partnered with Fresno Metropolitan Flood Control District (FMFCD) on water main rehab project in order to make improvements all at once in neighborhoods
- City has internal utilities coordination meetings with multiple departments
- Upgrades to City radio system to ensure services
- City is working with carriers on 5g implementation
- Master license agreement just approved (2020)
- City conducts cost study and charges conduit fees
  - Some carriers want to keep and use their own infrastructure
- RFQ developed to utilize excess fiber/conduits - still open for any carriers
- Information Services Department (ISD) partnership with Clovis Unified School District on Vast networks(CVIN) and fiber sharing/conduit sharing
  - Developing similar partnership with Fresno and Central Unified School District, and SCCCD

## Policies Not Referenced

- RC-1-a
- RC-1-b
- RC-1-c
- RC-1-d
- RC-1-e
- RC-1-f
- RC-1-g
- RC-1-h
### Accomplishments:

- ISD continually seeks funding
- ISD worked with Department of Public Utilities on recycled water project to include conduits, built 15 miles of conduits:
  - Underneath highway 99 and High Speed Rail right of way
  - City infrastructure to the parks, community centers
- ISD invites carriers to be a part of projects to share cost burden
- FMFCD consistently coordinates projects with the City
- Joint-use agreement with FUSD
- DPU has partnered with private companies when possible:
  - T3 water storage facility
  - Downtown water conveyance system improvements
- FAX is exploring providing free Wifi for passengers along BRT corridor
- Fax is expanding services in areas with highest population densities, established neighborhoods, and Downtown Fresno:
  - Title VI equity analysis requirements must be followed for service changes and fare changes
  - Implemented Bus Rapid Transit (BRT) corridor in 2018 along Blackstone, Kings Canyon, and into Downtown Fresno
- Short Range Transit Plan (SRTP), a Council of Governments document - updated every 2 years, contains performance standards, such as:
  - Minimum transit coverage, maximum headways, 7 days per week
  - On time performance
  - Bus cleanliness
  - Maintenance schedule/replacement

### Policies Not Referenced

- RC-1-a
- RC-1-b
- RC-1-c
- RC-1-d
- RC-1-e
- RC-1-f
- RC-1-g
- RC-1-h

### Policies Referenced
CHAPTER 7 OBJECTIVE

Objective RC-2: Promote land uses that conserve resources.

IMPLEMENTING POLICIES

RC-2-a: Link Land Use to Transportation

RC-2-b: Provide Infrastructure for Mixed-Use and Infill
### Accomplishments:

<table>
<thead>
<tr>
<th>Policies Referenced</th>
<th>Policies Not Referenced</th>
</tr>
</thead>
<tbody>
<tr>
<td>• RC-2-a</td>
<td>• T4 facility constructed downtown to prepare for more development</td>
</tr>
<tr>
<td>• RC-2-b</td>
<td>• Improved transmission grid mains to improve circulation and service</td>
</tr>
</tbody>
</table>

- Citywide Zoning Map Update (2016)
- Active Transportation Plan (2018)
- BRT System (2018)
- Fax 15 Service (2017)
- Southern Blackstone Smart Mobility Plan (2019)
- Metro plan was on parallel path at the time of General Plan
- Continue to make expenditures to make the sewer system more viable
CHAPTER 7 OBJECTIVE

Objective RC-3: Actively engage, listen to, educate, and enlist the support of the Fresno community on the need and strategies for resource conservation.

IMPLEMENTING POLICIES

RC-3-a: Track Trends in Resource Consumption
RC-3-b: Community Outreach and Joint Solution Making
RC-3-c: Multi-Jurisdictional Efforts
<table>
<thead>
<tr>
<th>Accomplishments:</th>
<th>Policies Referenced</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Water meters installed (2012)</td>
<td>• RC-3-a</td>
</tr>
<tr>
<td>o Transitioned to volumetric rate for water supply</td>
<td>• RC-3-b</td>
</tr>
<tr>
<td>• City Water app for smart phones</td>
<td></td>
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<tr>
<td>• Regular state reporting</td>
<td></td>
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<tr>
<td>• Urban Water Management Plan (every 5 years)</td>
<td></td>
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<tr>
<td>• City has ongoing coordination with PG&amp;E</td>
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<tr>
<td>• Fresno Irrigation District has annual reporting to the State</td>
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<tr>
<td>Policies Not Referenced</td>
<td></td>
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<tr>
<td>• RC-3-c</td>
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</tr>
</tbody>
</table>
CHAPTER 7 OBJECTIVE

Objective RC-4: In cooperation with other jurisdictions and agencies in the San Joaquin Valley Air Basin, take necessary actions to achieve and maintain compliance with State and federal air quality standards for criteria pollutants.

IMPLEMENTING POLICIES

RC-4-a: Support Regional Efforts
RC-4-b: Conditions of Approval
RC-4-c: Evaluate Impacts with Models
RC-4-d: Forward Information
RC-4-e: Support Employer-Based Efforts
RC-4-f: Municipal Operations and Fleet Actions
CHAPTER 7 OBJECTIVE

Objective RC-4: In cooperation with other jurisdictions and agencies in the San Joaquin Valley Air Basin, take necessary actions to achieve and maintain compliance with State and federal air quality standards for criteria pollutants.

IMPLEMENTING POLICIES

RC-4-g: FAX Actions
RC-4-h: Airport Actions
RC-4-i: Methane Capture
RC-4-j: All Departments
RC-4-k: Electric Vehicle Charging
## Accomplishments:

- All entitlements are routed to the appropriate parties and relevant agencies
- BRT System (2018)
- San Joaquin Valley Air Pollution Control District (SJVAPCD) Incentive programs
- Active Participation in AB 617 implementation
- Departments evaluating potential long term remote work plan
  - 60% ISD staff telecommuting from home during the COVID 19 pandemic
- All solid waste vehicles use alternative fuel (CNG or LNG)
- FAX transitioning to CNG bus fleet to Zero Emission Vehicle (ZEV) fleet per Innovative Clean Technology regulations and mandated timelines including:
  - 25% of fleet purchases by 2023,
  - 50% by 2026
  - 100% by 2030
  - Full fleet as ZEV by 2040
- City installed digesters at wastewater treatment plant
  - Working with PG&E to sell gas generated
  - Ultra low-nox flare to burn off excess gas
- Solar panels and electric vehicle charging (Citywide EV pilot program)
  - Funding from Air District and CALEVIP
- Airports developed and implementing ground transportation strategies to reduce excessive vehicle usage use and avoid shuttling activities commonly found at larger airports
  - Enlarged dedicated cell phone waiting lot, completed in 2019 – avoids/reduces circling through the airport facility
  - Onsite location of new parking facilities (garage) – no shuttling necessary
  - New parking garage ready for construction (July 2020 start with November 2021 completion) – increased capacity reduces airport trips by 50%

## Policies Referenced

- RC-4-a
- RC-4-b
- RC-4-c
- RC-4-d
- RC-4-e
- RC-4-f
- RC-4-g
- RC-4-h
- RC-4-i
- RC-4-j
- RC-4-k

## Policies Not Referenced

- RC-4-a
- RC-4-b
- RC-4-c
- RC-4-d
- RC-4-e
- RC-4-f
- RC-4-g
- RC-4-h
- RC-4-i
- RC-4-j
- RC-4-k
CHAPTER 7 OBJECTIVE

Objective RC-5: In cooperation with other jurisdictions and agencies in the San Joaquin Valley Air Basin, take timely, necessary, and the most cost-effective actions to achieve and maintain reductions in greenhouse gas emissions and all strategies that reduce the causes of climate change in order to limit and prevent the related potential detrimental effects upon public health and welfare of present and future residents of the Fresno community.

IMPLEMENTING POLICIES

RC-5-a: Support State Goal to Reduce Statewide GHG Emissions
RC-5-b: Greenhouse Gas Reduction Plan
RC-5-c: GHG Reduction through Design and Operations
RC-5-d: SCS and CAP Conformity Analysis
RC-5-e: Ensure Compliance
RC-5-f: Toolkit
RC-5-g: Evaluate Impacts with Models
## Accomplishments:

- City works closely with Fresno GOG
- General Plan PEIR (ongoing)
- VMT policy (ongoing)
- Departments evaluating potential long term remote work plan
  - 60% ISD staff telecommuting from home during the COVID 19 pandemic
- Northeast surface water treatment facility
  - Pipeline from Friant Kern canal that uses gravity, rather than electricity - southeast pipeline from river to use similar method
- 20 Megawatts solar projects being developed at wastewater treatment plants
- CEQA requirements for all entitlements
- FAX installing solar panels above bus bays at Municipal Service Center yard and the FAX Administration building
  - FAX adding 200 solar lights at bus stops across the city.
- All solid waste vehicles use alternative fuel (CNG or LNG)
- FAX transitioning to CNG bus fleet to Zero Emission Vehicle (ZEV) fleet per Innovative Clean Technology regulations and mandated timelines including:
  - 25% of fleet purchases by 2023,
  - 50% by 2026
  - 100% by 2030
  - Full fleet as ZEV by 2040

## Policies Not Referenced

- RC-5-d
- RC-5-f

## Policies Referenced

- RC-5-a
- RC-5-b
- RC-5-c
- RC-5-e
- RC-5-g
CHAPTER 7 OBJECTIVE

Objective RC-6: Ensure that Fresno has a reliable, long-range source of drinkable water.

IMPLEMENTING POLICIES

RC-6-a: Regional Efforts
RC-6-b: Water Plans
RC-6-c: Land Use and Development Compliance
RC-6-d: Recycled Water
RC-6-e: Protect Aquifer
RC-6-f: Regulate Sewage Disposal Facilities
CHAPTER 7 OBJECTIVE

Objective RC-6: Ensure that Fresno has a reliable, long-range source of drinkable water.

IMPLEMENTING POLICIES

RC-6-g: Protect Recharge Areas
RC-6-h: Conditions of Approval
RC-6-i: Natural Recharge
**Accomplishments:**

- Upper Kings Basin Integrated Regional Water Management Plan updated – still needs to be adopted
- Collaboration with members of Groundwater Sustainability agency
- All entitlements are routed to the appropriate parties and relevant agencies and appropriate conditions applied
- City of Fresno Recycled Water Master Plan (2015)
- Most large canals are lined with open bottom to allow for recharge.
  - Canals are lined only when necessary for maintenance and integrity issues.
  - Canals small enough to be conveyed in a 54” pipe or smaller are piped for public safety

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**Policies Referenced**

- RC-6-a
- RC-6-c
- RC-6-d
- RC-6-g
- RC-6-h
- RC-6-i

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**Policies Not Referenced**

- RC-6-b
- RC-6-e
- RC-6-f
- RC-6-g
Objective RC-7: Promote water conservation through standards, incentives and capital investments.

RC-7-a: Water Conservation Program Target
RC-7-b: Water Pricing and Metering
RC-7-c: Best Practices for Conservation
RC-7-d: Update Standards for New Development
RC-7-e: Retrofit City Facilities, and Consider Incentives Programs to Encourage Retrofitting of Other Existing Public and Private Residential and Non-Residential Facilities and Sites
CHAPTER 7 OBJECTIVE

Objective RC-7: Promote water conservation through standards, incentives and capital investments.

IMPLEMENTING POLICIES

RC-7-f: Implementation and Update Conservation Program
RC-7-g: Educate on State Requirements
RC-7-h: Landscape Water Conservation Standards
RC-7-i: PACE Financing
## Accomplishments:

- Water meters installed (2012)
  - Volumetric water rates - tiered rates will be analyzed during the next rate planning effort.
- 2020 Gallons Per Capita Per Day target met - new targets will be defined in the 2020 Urban Water Management Plan (UWMP)
- Conservation programs are ongoing and routinely updated to meet customer need - water Conservation Ordinance in FMC was updated in 2019.
- Visually inspections for water wasting
- Yearly Outdoor Water Use Schedule
- Water Conservation measures identified in the Municipal Code (updated 2019)
- Application of California Green Building Code and Model Water Efficient Landscape Ordinance
- All new City facilities and retrofits incorporate water wise landscaping to achieve a reduction in outdoor water use
  - Current efforts include retrofits to reduce the spread of COVID-19
- Education efforts are incorporated into the Water Conservation Program to attain water conservation goals outlined in the City’s UWMP
- The Department of Public Utilities works with the Planning and Development Department to apply water conservation standards to all new development proposed in the City
  - Standards include CA Green Building Code and State Model Water Efficient Landscape Ordinance.

## Policies Referenced

- RC-7-a
- RC-7-b
- RC-7-c
- RC-7-d
- RC-7-e
- RC-7-f
- RC-7-g
- RC-7-h

## Policies Not Referenced

- RC-7-i
CHAPTER 7 OBJECTIVE

Objective RC-8: Reduce the consumption of non-renewable energy resources by requiring and encouraging conservation measures and the use of alternative energy sources.

IMPLEMENTING POLICIES

RC-8-a: Existing Standards and Programs
RC-8-b: Energy Reduction Targets
RC-8-c: Energy Conservation in New Development
RC-8-d: Incentives
RC-8-e: Energy Use Disclosure
RC-8-f: City Heating and Cooling
CHAPTER 7 OBJECTIVE

Objective RC-8: Reduce the consumption of non-renewable energy resources by requiring and encouraging conservation measures and the use of alternative energy sources.

IMPLEMENTING POLICIES

RC-8-g: Revolving Energy Fund
RC-8-h: Solar Assistance
RC-8-i: Renewable Target
RC-8-j: Alternative Fuel Network
RC-8-k: Energy Efficiency Education
## Accomplishments:

- **Coordinating with the City's Electric Utility (PG&E)**
  - The goal of reducing energy use in both the residential and non-residential segments continues to evolve and report progress.

- **The City is currently in compliance with CA AB 802**
  - Requires the energy usage reporting of all large facilities meeting the state's reporting criteria.

- **City has made progress in reducing kWh and GHG by:**
  - Converting City Streetlights and Parking Garages to LED,
  - Comprehensive Energy reduction projects and City Hall and the MSC
  - The City is actively working on more projects citywide.

- **The City has worked to improve their permitting process for solar installations which has increased the number of solar installations throughout the City.**

- **The City has increased the number of City owned facilities utilizing renewable energy (solar, biogas & gravity) with plans to become more aggressive going forward.**

- **The City has installed over 40 EV Chargers throughout facilities**
  - The Airport is implementing up to 87 additional Network Charges with a pilot program citywide.

- **The City of Fresno Partnered with PG&E to implement the Fresno Energywatch program which educated constituents on the importance and value of being energy efficient.**

### Policies Referenced

- RC-8-a
- RC-8-b
- RC-8-e
- RC-8-f
- RC-8-g
- RC-8-h
- RC-8-i
- RC-8-j
- RC-8-k

### Policies Not Referenced

- RC-8-c
- RC-8-d
CHAPTER 7 OBJECTIVE

Objective RC-9: Preserve agricultural land outside of the area planned for urbanization under this General Plan.

IMPLEMENTING POLICIES

RC-9-a: Regional Cooperation
RC-9-b: Unincorporated Land in the Planning Area
RC-9-c: Farmland Preservation Program
<table>
<thead>
<tr>
<th>Accomplishments:</th>
<th>Policies Not Reference:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Fresno, Clovis, Madera County, and Fresno County meet and coordinate on a variety of issues</td>
<td>• RC-9-c</td>
</tr>
<tr>
<td>• SOI Boundary Held (2013)</td>
<td></td>
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<tr>
<td>• Growth Areas Identified (2014)</td>
<td></td>
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<tr>
<td>• Citywide Development Code (2015)</td>
<td></td>
</tr>
<tr>
<td>• Citywide Zoning Map Update (2016)</td>
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</tr>
<tr>
<td>• Specific Plan of the West Area (ongoing)</td>
<td></td>
</tr>
</tbody>
</table>
Objective RC-10: Conserve aggregate mineral resources within the Planning Area, as identified by the Division of Mines and Geology, and allow for responsible extraction to meet Fresno’s needs.

Implementing Policies

RC-10-a: Meet Future Needs
RC-10-b: Zoning in San Joaquin Riverbottom
RC-10-c: Processing-Mining Link
RC-10-d: Manage MRZ-2 Areas
RC-10-e: Existing Permits
RC-10-f: Cooperate on Uniform Criteria
## Accomplishments:

- Citywide Zoning Map Update (2016)
  - Which includes Mining Overlay District
- Application and Operation Standards for surface mining and reclamation activities in Fresno Municipal Code
- Fresno, Clovis, Madera County, and Fresno County meet and coordinate on a variety of issues

## Policies Referenced

- RC-10-a
- RC-10-b
- RC-10-c
- RC-10-d
- RC-10-e
- RC-10-f

## Policies Not Referenced

- RC-10-a
- RC-10-b
- RC-10-c
- RC-10-d
- RC-10-e
- RC-10-f
CHAPTER 7 OBJECTIVE

Objective RC-11: Strive to reduce the solid waste going to landfills to zero by 2035.

IMPLEMENTING POLICIES

RC-11-a: Waste Reduction Strategies
RC-11-b: Zero Waste Strategy
RC-11-c: Industry Efforts
### Accomplishments:

- All residential development is required to participate in recyclable material collection and storage
- Solid waste and recycling material collection and storage is reviewed during the entitlement phase to establish the appropriate size and recycling areas based upon anticipated volume of material generated
- Continue to work with AB939 MOU partners to educate community on hazardous material - Relocation of facility to the Fresno area Spring of 2022 is underway
- Mandatory recycling ordinance, recycling and organics diversion are conditions of Franchise agreements (2011)
- Waste audits, recycling audits, and driver tagging systems used to identify contamination in loads
  - Recycling coordinators for both franchise haulers to do large unit and commercial outreach
  - Residential outreach done by city teams
- Yearly meetings with CalRecycle and Franchise haulers to identify missed opportunities and goals achieved
- Franchise haulers are actively engaged in organics recycling as part of their contract requirements
- Solid waste trucks currently run on liquid natural gas (LNG) as a low emission clean air collection fleet
- The city is looking at composting programs in conjunction with the 2019 Biosolids Master Plan
- Through the use of the city's recycle hotline we educate the public on programs designed to reduce wastes going to landfill such as Bye Bye Mattress, carpet recycling, electronic recycling, and other regional programs
  - The city has not met its 75% goal to date

### Policies Referenced

- RC-11-a
- RC-11-b

### Policies Not Referenced

- RC-11-a
- RC-11-b