

RiverAlert App

Saving Lives. One Alert at a Time.

Presented by:

The AI Cowboys | San Antonio, Texas

Empowering communities through real-time AI-driven flood alerts.



The Problem

Texas leads the U.S. in flood-related deaths, with Bexar County hit hard by river overflows and low-water crossings.

- Residents and commuters receive delayed or generic alerts.
- Current apps rely on limited government sensor data, missing many high-risk areas.
- Drivers lack real-time flood navigation during storms.
- Schools, emergency services, and families are unprepared without hyper-local alerts.



Impact Snapshot (2023-2024)

Texas Flood Deaths (2023-2024)

- **39 fatalities** statewide, **6 in Bexar County** alone.
- **Projected Annual Flood Damage (Texas):**
- **\$3.7 billion** statewide; **\$58 million** in Bexar County.

(Sources: NOAA, Texas Department of Emergency Management)

- Texas recorded **39 flood-related deaths**, including **6 in Bexar County**.
- Projected flood damages in Texas exceed **\$3.7 billion annually**, with Bexar County facing **\$58 million in estimated damages**.
- Immediate and targeted alerts could significantly reduce loss of life and property.

Our Solution – RiverAlert App

A hyper-local flood detection and alert app using smart sensors and AI.

Key Features:



Real-time water level alerts

Via custom-installed sensors



Turn-by-turn flood-safe navigation

Waze/Google Maps API integration



User-generated flood reports

With community upvotes



Predictive AI warnings

Based on historical weather + sensor patterns



District-specific alerts

For schools, city zones, and emergency units

What Makes Us Different

Feature	Other Apps	RiverAlert
Uses USGS/NOAA Only	✓	✓ + Own Local Sensors
Community Reporting	✗	✓
Local Government Integration	✗	✓
Safe Route Driving Alerts	✗	✓
Predictive AI Risk Forecast	✗	✓
School & Public Agency Alerts	✗	✓



Data stored securely with optional agency dashboard access

Pilot Program – Bexar County

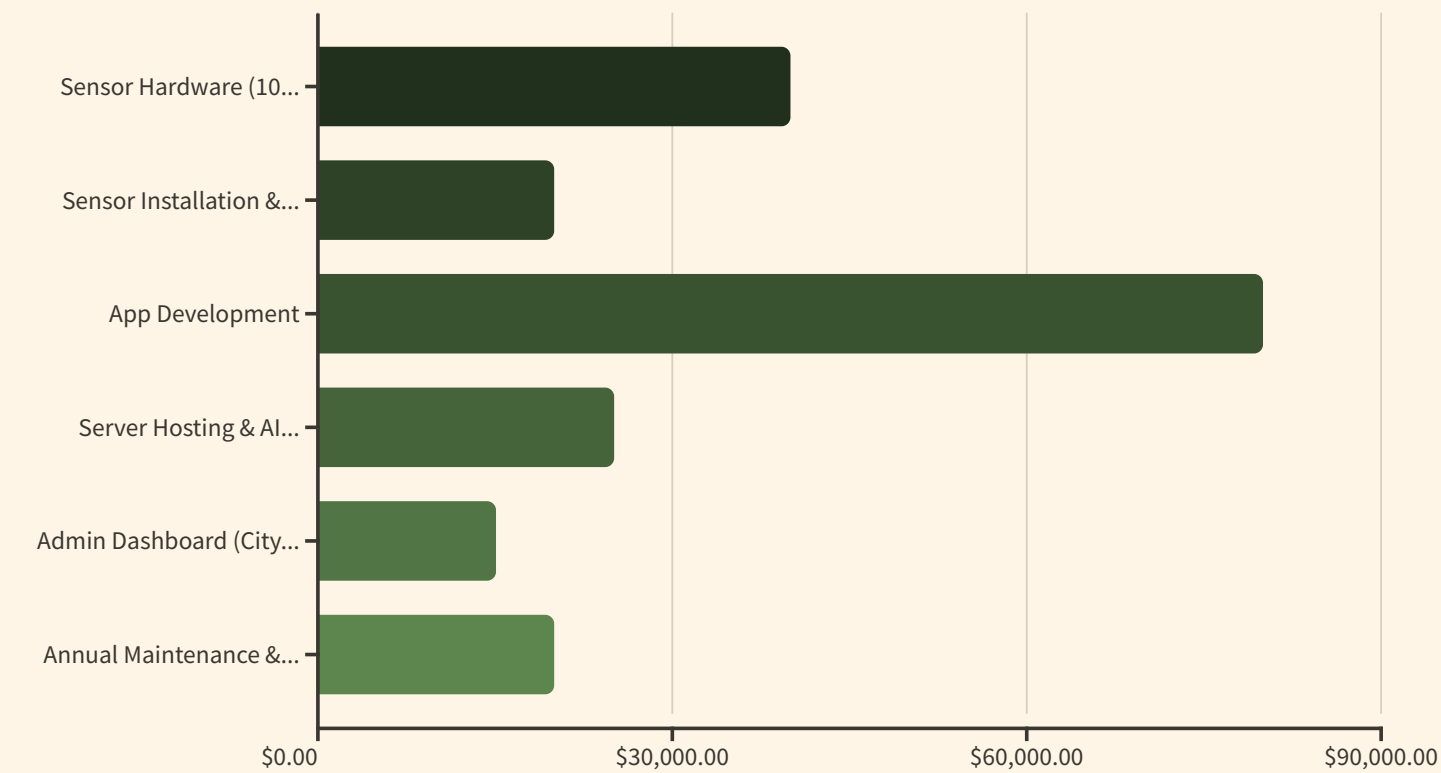
We propose a Bexar County pilot with 10 key low-water crossings + app launch.

Pilot Scope:

- 10 solar-powered IoT river sensors (with radar level detection)
- Custom Bexar-specific alert zones (schools, highways, neighborhoods)
- App access for public, police, and city officials
- Integrations with Waze, NWS, and city emergency notifications



Budget & Cost Breakdown (Pilot Year)



Total Pilot Estimate: \$200,000

Optional Grant/Funding Sources:

FEMA Mitigation Grants, Texas GLO, DOT Safety Funds



Expansion Plan

1

2025 Goal

Expand across 5+ Texas counties (Austin, Houston, DFW, Rio Grande Valley)

2

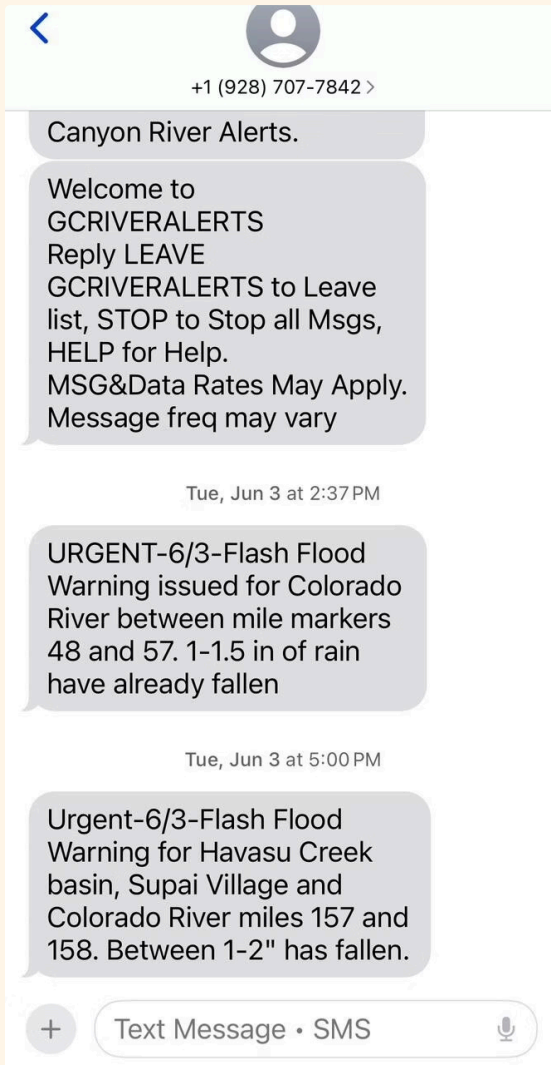
Revenue Options

- Freemium app: basic alerts free, premium AI + safe driving tools subscription
- SaaS model: dashboard licenses for cities & school districts
- Sponsored alerts by insurance companies & public safety orgs

3

Job Creation & Partnerships

Local sensor installers, support staff, and emergency tech liaisons



Market Research

What is the government doing and what solutions are currently active that is closest to the RiverAlert App?

U.S. Geological Survey

U.S. Department of the Interior



What USGS Does, and How RiverAlert Elevates It

The AI Cowboys is leveraging proven models while adding local innovation

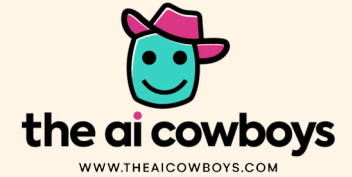
WaterAlert is a free USGS service allowing users to subscribe to threshold-based notifications (e.g., river levels) via email or SMS—powered by approximately **11,000 nationwide streamgages**, with updates typically hourly or faster in emergencies

Grand Canyon River Alert System (GCRAS) is a cutting-edge emergency alert network designed for backcountry users, sending **short-text alerts via satellite devices (Garmin, SPOT)** for flash floods, debris flows, and other hazards—even where there's no cell coverage. Messages arrive within about **2–10 minutes** after issuance

Where RiverAlert Goes Farther

Feature	USGS Services	RiverAlert Advantage
Sensor Network	Relies on state/federal fixed USGS gauges	Adds your own low-cost IoT sensors in underserved flood zones
Alert Recipients	Public subscribers only	Citizens <i>and</i> targeted zones (e.g., schools, emergency crews)
Delivery Channels	Email / SMS (cellular/Satellite)	Push notifications, SMS, and Waze/Google-Maps Safe Navigation API
Latency in Hazard Zones	60 min update (non-emergency) to emergency faster	Real-time within seconds; predictive AI alerts
User Interactivity	No Citizen reporting	Community flood reports, photos, and hazard voting
Predictive Model	✗	AI forecast of rising waters before threshold breach
Localization	Statewide generic alerts	Granular San Antonio-specific, school-zone-based targeting

Call to Action – Join the Mission



Let's make Bexar County a national model for flood safety.



County partnership & endorsement



\$200K pilot funding



Real-time collaboration with emergency & school systems

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