

California Optimization Bond

Napa Wildfire Resilience System

Phase 1 key messages

**Moving investment upstream:
from prevention and resilience to durable
funding — and, where justified,
investment**

October 2026

Phase 1 completed by the Darwin Fund, with support from CSAA Insurance Group. Analysis undertaken using Darwin Vantage, Redpill Group's decision and investment intelligence capability.



Move investment upstream — before disaster

Phase 1 assessed Napa's existing wildfire-resilience work and how it could be sustained and funded. It did not deliver new treatments or establish an investment. The aim is to move resources into prevention before disaster, effectively, equitably and durably.

Before disaster

Shift more resources into prevention, preparedness and maintained resilience.

Right form of finance

Use grants, public budgets, philanthropy, service payments and investment for the jobs they do best.

Equitable impact

Protect communities and avoid shifting costs onto those least able to bear them.

Test what works, who benefits and who might contribute — then decide whether additional investment would help.

A funding approach, not necessarily a bond

The Optimization Bond is a way of coordinating existing funding and potential new contributions to sustain wildfire resilience. Additional repayable investment is considered only where justified and affordable. A bond may never be needed.

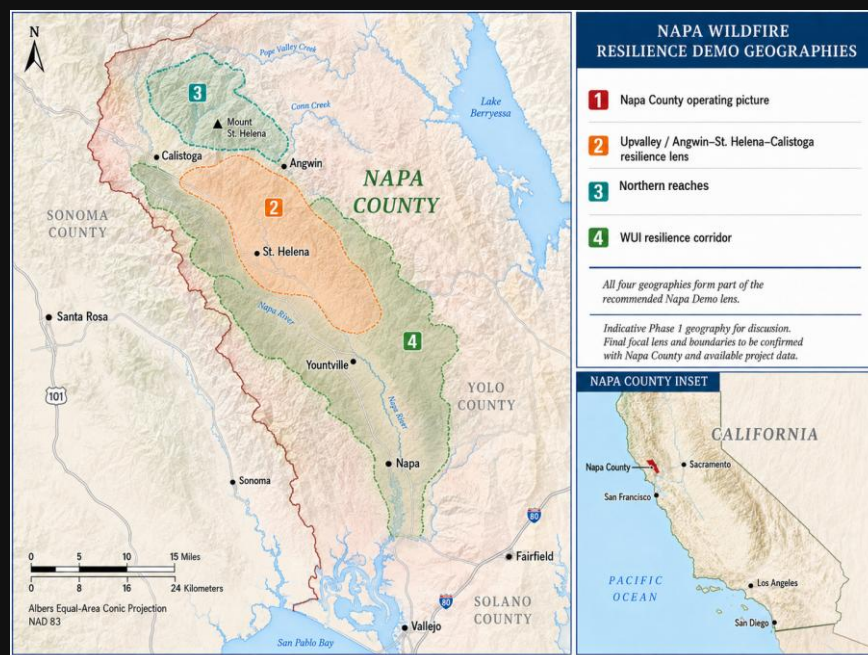


What it is
A practical way to connect prevention, evidence, long-term funding and, where needed, investment.

What it is not
It is not a Napa-scale bond or investment available today. No dependable repayment source has yet been established for one.

Why it matters
It can connect existing public and philanthropic funding with potential contributions from those who benefit, without assuming anyone will pay.

Napa is unusually well positioned for this work



Existing delivery system

Napa Firewise, Napa County Resource Conservation District (RCD), County and City agencies, fire services, landowners and community partners.

Visible activity base

Enhanced Resilience Site (ERS) pipeline, historic treatments, plans and lessons from previous fires.

Real institutional relevance

Insurer interest, utility interface, water assets and public policy tailwinds.

A genuine next step

The question is not whether Napa has activity. It is how value can be evidenced, sustained and mobilized.

Napa already has a strong and unusually capable resilience platform.

It brings together established delivery capability, investment, planning, data, institutional relationships and community engagement — providing a strong foundation for the next stage of the work.

Napa already has a strong resilience platform

Phase 1 found an operating base that can support a serious next-stage validation: real actors, real projects, real data and real institutional relevance.

552

ERS records
(551 unique parcels)

54

recorded wildfire
treatment projects

99

treatments recorded
across Napa

~6,200

Historical treatment
footprint (acres)

10–15

new landowners
entering ERS each month

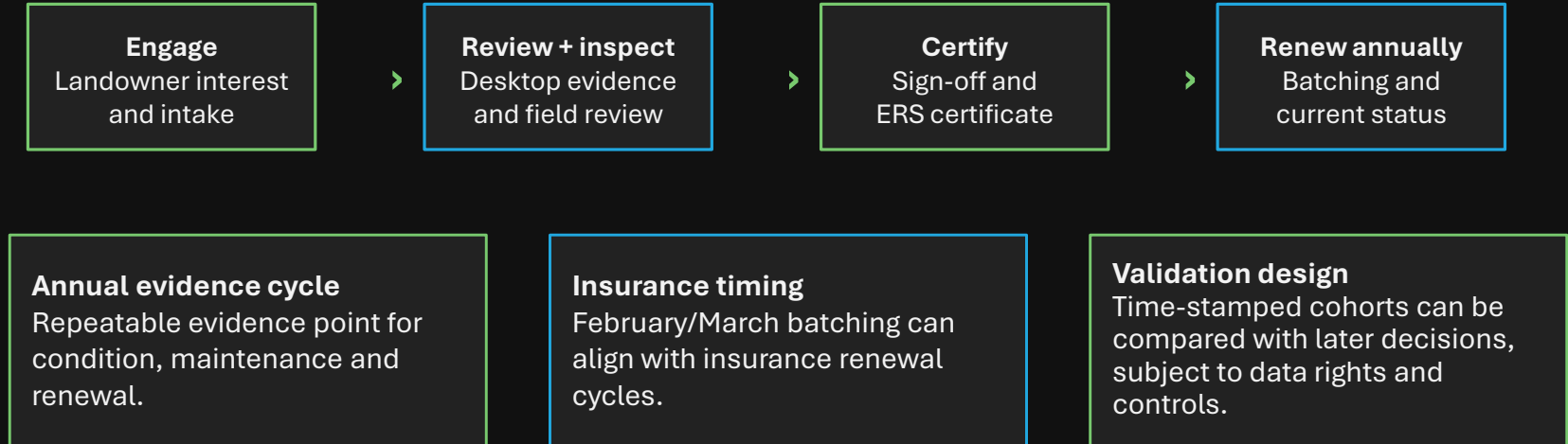
30–60

days typical ERS
integration cycle

These figures show activity, not proven risk reduction. The historical acreage counts overlapping treatment areas only once; ERS operating rates are estimates from August 2026.

ERS is becoming a repeatable operating cycle

Napa Firewise is moving toward an annual, time-stamped ERS renewal cycle, with Napa Firewise/Fire Agency certification, to inform maintenance and insurance tests.



Operational foundation — not yet independent proof of risk reduction or insurer action.

Maintenance is the investment challenge

Wildfire resilience is not a one-off capital project. It is a maintained service.

What project funding often does

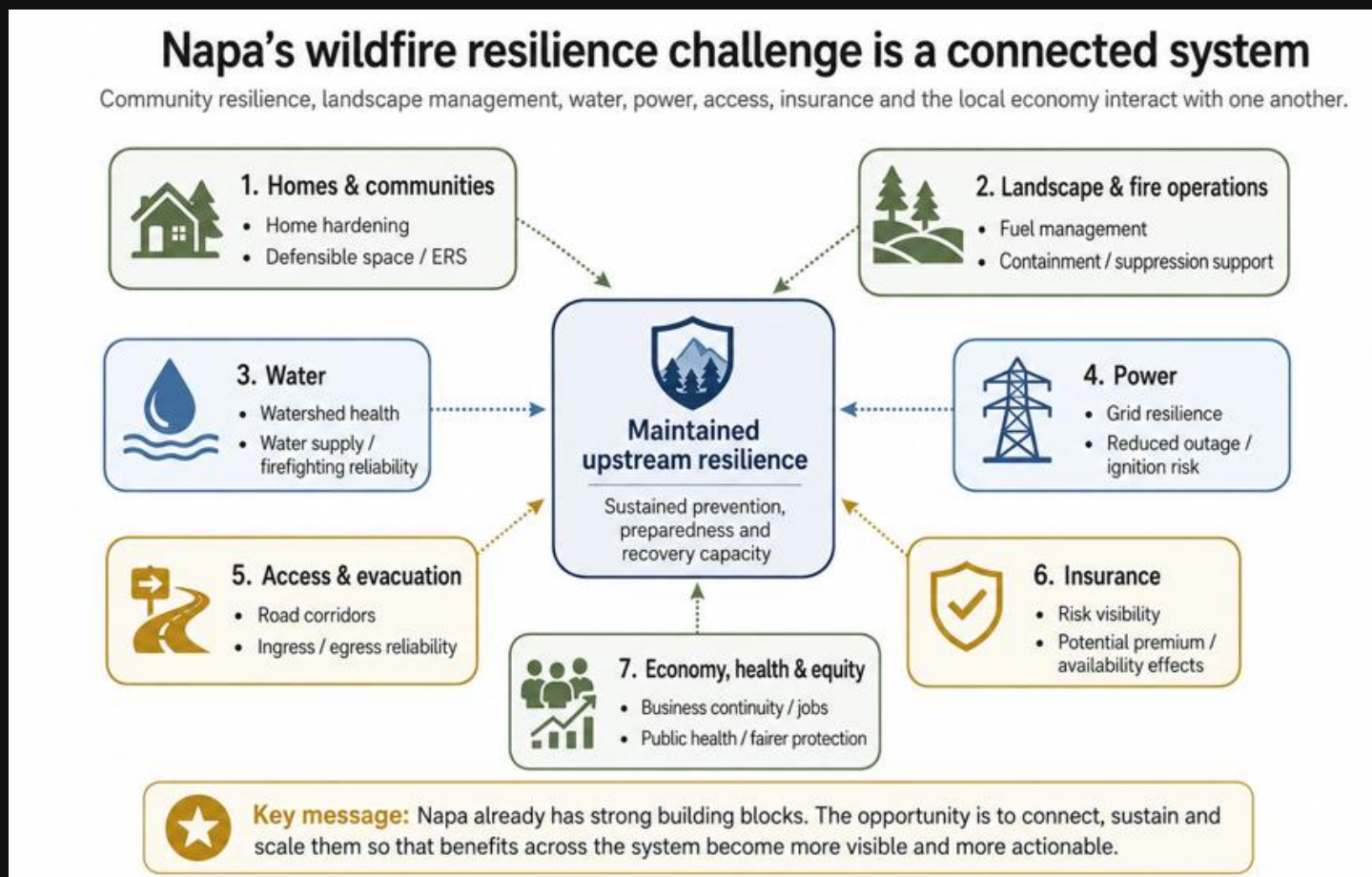
- Pays for activity
- Has defined grant windows
- May not cover condition, renewal or gaps between cycles
- Can leave value degrading over time

What a resilience service needs

- Defined standard
- Current condition evidence
- Maintenance triggers
- Renewal cycle
- Durable resource pathway

Phase 2 priority: Define what sustained maintenance costs, who benefits and who might contribute — then determine whether repayable finance has a role.

System intersections create the opportunity



Lake Hennessey, Napa's primary drinking-water source, is a potential Phase 2 test linking forest management, water protection and utility resilience. Local agreement and technical validation are required; benefits must not be double counted.

The value is broader than insured property loss

Economic continuity

Tourism generated \$2.8bn total economic impact in 2025; the Pickett Fire produced at least \$65m in preliminary agricultural losses.

Public health + social resilience

Smoke, evacuation, housing, work continuity and essential services matter — especially where capacity to self-protect varies.

Local resilience economy

Treatment, maintenance, home hardening, monitoring, prescribed fire, grazing and woody-residue uses are real hypotheses to test.

Policy alignment

AB 1960/SB 973 advance mitigation evidence and coordination; Proposition 4 enables joint grants; SB 254/SB 1153 sharpen utility and water resilience. Climate Resilience Districts and local revenue offer possible funding routes.

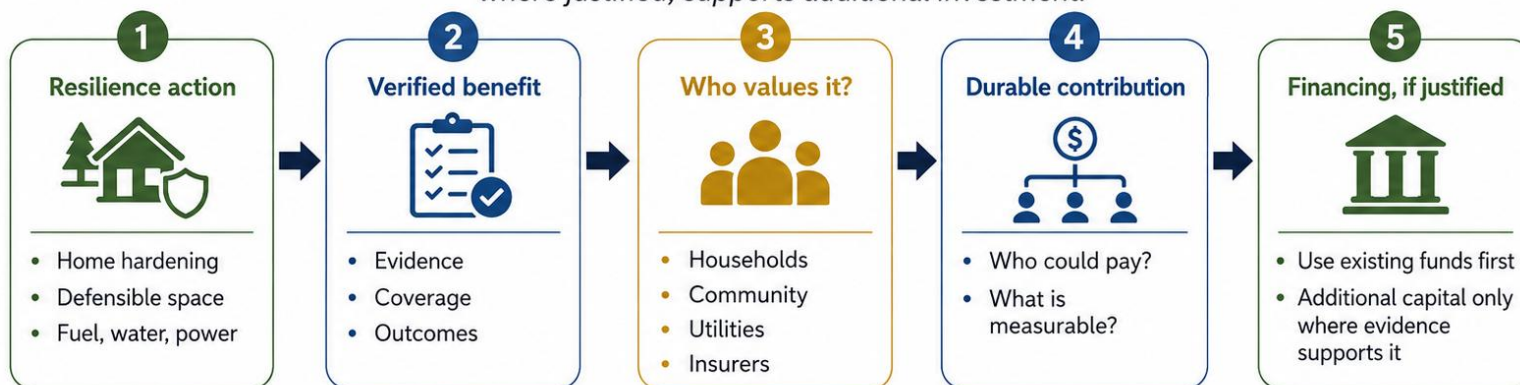
But policy tailwinds do not automatically create long-duration maintenance funding, multi-beneficiary commitments or investable cash flow.

Napa does not have a resilience-value problem

It has a value-transmission challenge.

Value transmission pathway: from resilience performance to sustainable funding and investment

Phase 2 must test how verified upstream resilience creates visible value and, where justified, supports additional investment.



Benefit ≠ funding ≠ repayment cash flow



Phase 2 must test where value can be evidenced, aggregated and translated into durable funding or investment support.



Key message: The aim is not to force a bond. The aim is to identify the best route to sustained upstream funding, while showing where an Optimization Bond could become the most likely medium- to long-term solution.

What Phase 1 did not prove

This is a strength of the work: the report separates evidence, hypotheses and decisions.

No Napa-scale investment proposition established

No issuer, obligor or durable repayment source has been established for Napa-scale finance.

No insurer outcome assumed

Premium, coverage, underwriting and portfolio effects must be tested with carriers and data rights.

No utility payment assumed

PG&E baseline duties, ratepayer value and any incremental shared-benefit service must remain distinct.

No treatment-effect shortcut

Current condition, maintenance, counterfactual and physical outcome evidence remain essential.

No single mechanism forced

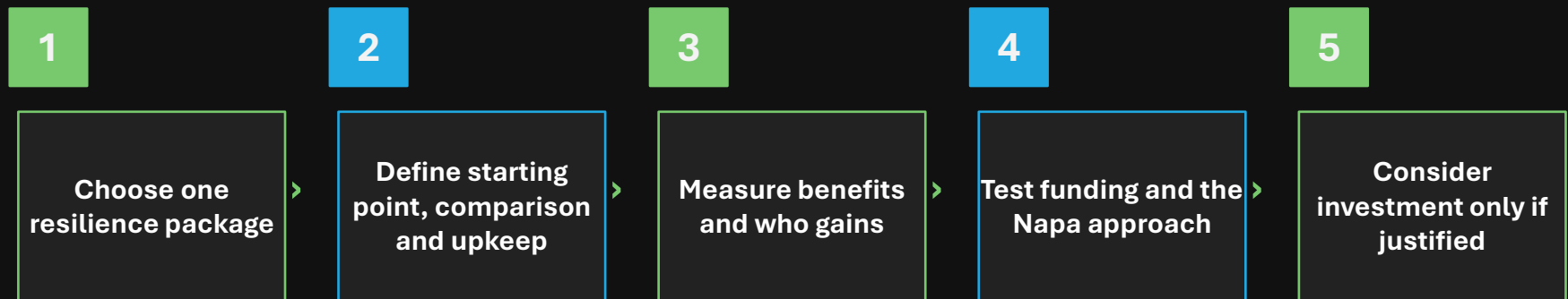
Public, grant, philanthropic, service-payment and investment pathways all remain legitimate.

No loss of equity discipline

Who benefits, who pays and who should not pay are capital-design questions.

Testing and validation: the right next step

Phase 2 would select one set of interventions, compare what happens with and without them, measure the benefits and test how they could be maintained and funded.



Can Napa better maintain and measure its existing resilience work, fund it over the long term and use additional investment only where the evidence supports it?

Participation makes value decision-useful

**Phase 2 should be designed around a practical partner question:
what evidence would help your organization make a real decision?**

Insurers / reinsurers

Can community wildfire prevention improve insurers' overall risk, without assuming household savings become repayment income?

County + public entities

Which activities deserve sustained public support, and through what authority?

Utilities + infrastructure

Could maintained prevention protect infrastructure and justify an additional contribution?

Water interests

Could forest management protect drinking-water sources and justify sustained support?

Philanthropy

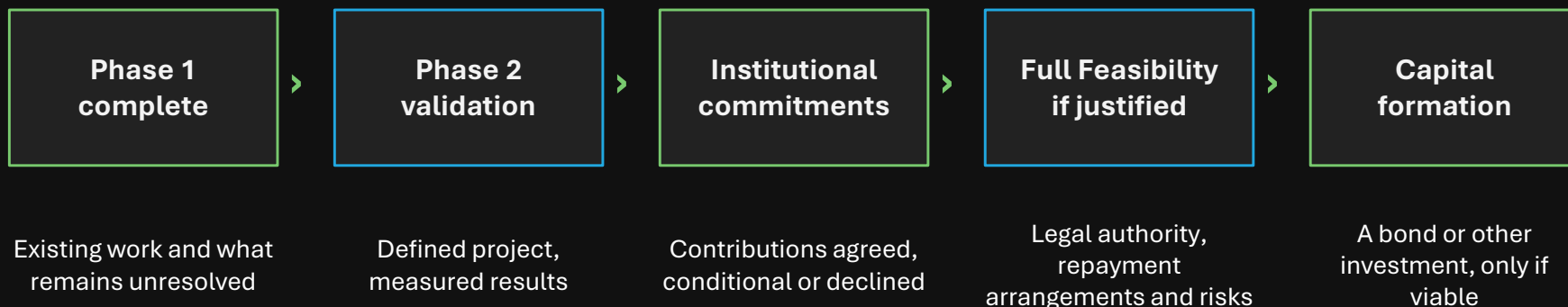
Can early support unlock better evidence, fair access and lasting delivery?

Delivery partners

What work, costs and maintenance arrangements are practical over time?

No Napa-scale investment offer today

The question for potential investors is how Napa might turn verified resilience benefits into an investment that can be reliably repaid.



A detailed financial study would begin only if there is a genuine financing need, reliable repayment income and an organization with the authority to raise and repay the funds.

Napa and California: two parallel paths

Napa can develop its own funding approach while California explores a wider one. Neither depends on the other, but both can share evidence, institutional relationships and lessons.

Immediate action: strengthen resilience

Use grants, sponsor support, public budgets and philanthropy for evidence, pre-development, maintenance design and public-purpose work.

Napa-scale funding approach

Napa Firewise reports an existing reimbursement bridge to support delivery. Separately, test long-term maintenance funding, potential insurer and utility contributions, local revenue and a Napa Resilience Bond where justified.

Statewide development – in parallel

Develop a statewide approach in parallel, using evidence from Napa and other demonstrations as it emerges. Any proposed investment or bond issuance would require its own feasibility assessment.

Success does not require a conventional bond. It requires the best durable funding and financing architecture for the resilience objective.

Test what works – and how to sustain it

Recommended decision

We propose a focused, partner-supported Phase 2: select one practical Napa intervention package, measure what it achieves, define the maintenance needed and test the best long-term funding arrangements. No particular financing outcome is assumed.

1. Confirm participants

Agree which decisions partners need evidence to make and what information can be shared.

2. Select the package

Choose one maintainable local package.

3. Test the architecture

Match funding to the need.
Consider a full investment study only if reliable repayment appears possible.

California policy opportunity: Napa can test how improved wildfire evidence, coordinated funding and water and utility resilience work together.

Interested in supporting or participating in Phase 2? Contact rcdaniels@redpillgroup.com