

Appendix 2. Archetypes: problems and solutions.

Below we provide detailed tables for each archetype. The tables summarize key characteristics describing the funding challenge and list interventions that may address them. These interventions were generated by workshop participants themselves and should be considered important but only partial solutions to each finance challenge.

Table A2.1: Characteristics, Underlying Causes and Potential Solutions to Address the Low Priority Archetype

Characteristics and Causes	Potential Solutions
<ul style="list-style-type: none"> • The “tragedy of urgency” (or of immediacy), i.e., the constant pressure from immediate needs, daily demands or other pressing issues • Backlog of other important issues that are not being addressed • The lack of understanding of climate change risks and lack of interest or even disbelief and avoidance (among leaders and stakeholders) • Lack of legitimacy of the adaptation issue (sometimes vis-à-vis mitigation) • Difficulty linking adaptation to core mission and difficulty defining an overarching goal to work towards together • Lack of measures of success, progress, or performance • Doing adaptation “behind the scenes” allows some work to get done in the “margins” of available resources, but invisibility reinforces its seeming unimportance • Lack of higher-level mandate, requiring that adaptation planning is being done 	<ul style="list-style-type: none"> • Education and trainings for local government staff that help make the link between existing core missions and adaptation; align goals, policies, fundraising and implementation • Help with framing, communication and engagement, particularly of skeptical audiences, with concrete examples, stories and visuals of what adaptation looks like, and linked to locally resonant values • Building communities of practice among local government staff to support peer learning and exchange of strategies • Local-to-local and local-to-state elected exchange on funding needs • Help with identifying measures of success and progress to evaluate resilience measures • Periodic evaluation of grant programs to show what is working will generate more interest and improve applications, efforts • Make planning allocation based on population size, without application, but mandate that adaptation planning is undertaken

Source: The Authors

Table A2.2: Characteristics, Underlying Causes and Potential Solutions to Address the Lack of Leadership Archetype

Characteristics and Causes	Potential Solutions
<ul style="list-style-type: none"> • A sense of weak government and lack of empowerment, particularly problematic when among top-level executives • Lack of a long-term vision, or ability to generate one, myopic thinking, lack of galvanizing 	<ul style="list-style-type: none"> • Much greater emphasis on education of local leaders and joint strategizing among them so they feel more comfortable taking on adaptation • Education of the public about climate change and to increase governance literacy so people can put pressure on their elected leaders and

<p>energy, resistance to change, and weak action</p> <ul style="list-style-type: none"> • The “politics” of taking on climate change, particularly (but not only) in conservative contexts • Lack of higher-level mandate, providing cover for local-level officials to take up adaptation • Need of a “perfect storm of leadership” with multiple individuals pulling together 	<p>know when and where to speak out</p> <ul style="list-style-type: none"> • Local and statewide mandates to provide cover • Neighboring community leaders serving as ambassadors to those not yet taking action • Within government entities, fostering a risk-taking organizational culture (“we have to fail a little to find success”) • Research and messaging on co-benefits and positive benefit-cost ratios • Create narrative of mitigation and adaptation synergies and complementarity that resonates • Pressure from rating agencies (such as Moody’s) and potential liability lawsuits are likely to spur greater leadership.¹
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Source: The Authors

Table A2.3: Characteristics, Underlying Causes and Potential Solutions to Address the Conflict of Interest Archetype

Characteristics and Causes	Potential Solutions
<ul style="list-style-type: none"> • Multiple (competing) missions can make it difficult to spend money on adaptation • Historical legacies (e.g., land use decisions and resulting patterns of vulnerability) are difficult to undo and potentially politically embarrassing • Mis-aligned incentives (e.g., insurance for exposed projects; subsidies for “bad” projects) can perpetuate trends that increase exposure • Political pressures and undue influence from local interests can undermine focus on broader community goals or the needs of the less powerful • Avoidance of facing difficult trade-offs 	<ul style="list-style-type: none"> • Education and training in how adaptation strategies can be linked to the core mission • Shifting of “zero-sum” narratives to “shared opportunity” narratives where communities learn to act together and shift priorities together • Need insurance companies to come to the table with local (and higher-level) governments to foster better alignment, identify strategies that redirect development into safer locations • Identify strategies to move away from dependence on revenue from greenhouse gas emitting activities • Need process to rethink fundamentally how existing (dis)incentives (e.g., tax structure, subsidies, lack of risk disclosure) undermine the financial future of local government

Source: The Authors

¹ This suggestion was added post-stakeholder workshops to reflect recent development in the financial and legal world, though at the time of the workshops it was not mentioned.

Table A2.4: Characteristics, Underlying Causes and Potential Solutions to Address the Disproportionate Burden Archetype

Characteristics and Causes	Potential Solutions
<ul style="list-style-type: none"> • Long histories of institutionalized racism, neglect of remote and low-income communities, legacies of deferred infrastructure maintenance, persistent lack of investment in education, diverse local economies, health care, or environmental protection • Current problems are all-demanding • Long-standing vulnerabilities and lack of local governments' adaptive capacity • Outdated models of local governance with limited opportunity for meaningful stakeholder engagement • Limited political voice • Limited cash flow or reserves to divert to thinking about adaptation/the future • Perceived political/cultural limits to raise additional fees or taxes 	<ul style="list-style-type: none"> • Sustained funding for “disadvantaged” communities • Provide more capacity (building) grants • Earmark funding prior to distribution to ensure a set amount is dedicated to disproportionately burdened local governments • Regional approaches to adaptation, where greater-capacity local governments or non-profit entities carry the burden of applying for and administering funding. • Mandates for funding recipients to work with disproportionately burdened community groups. • Use existing templates to include community benefits agreements into statements of work with consultants • Provide grant writing services • Turn the stipend model on its head; instead charge a fee for non-participation, so local communities have a greater stake in participating in adaptation processes • Raise Pigouvian taxes/utility user taxes to relate spending to what the community wants

Source: The Authors

Table A2.5: Characteristics, Underlying Causes and Potential Solutions to Address the Inappropriate Funding Scale Archetype

Characteristics and Causes	Potential Solutions
<ul style="list-style-type: none"> • Scale mismatch between global change problem and local capacity to address its impacts • Responsibility for climate adaptation is incommensurate with responsibility for climate change problem • Inefficiency of project-by-project approach to adaptation and adaptation finance • Problem of piecemeal interventions when systemic solutions are needed • Lack of capacity of local governments to take on long-term funding challenge 	<ul style="list-style-type: none"> • Need for WWII mobilization to address mitigation and adaptation (and thereby contain the problem to something more manageable) • Need for State and federal solutions at bigger scale (e.g., funded mandates, changes in statewide tax law, block grants etc.) • Alternatively, assume that there will be <u>no</u> State or federal money forthcoming, to spur radical rethinking and solutions • Need for an empowered regional authority to apply for and receive significant regional adaptation funds, with clear on decision-making, control and disbursement rules

<ul style="list-style-type: none"> • Lack of appropriate funding recipient for systemic solutions at the regional scale 	<ul style="list-style-type: none"> • Greater state leadership to help local communities • Creating regional legislative caucuses to foster understanding of local/regional funding needs • Mandates to look longer term would enable utilities and agencies to demand fees and plans for longer-term solutions • Look to Integrated Regional Water Management (significant funding, robust decision-making structure) to apply model to other sectors/areas • Use Proposition 50 funding for regional collaboration • Look beyond California (e.g., Southeast Florida 4-County Compact for Climate Adaptation) for alternative supra-local funding models • Educate and lobby at State and federal levels to bring more money to local level, to invest in critical land areas and assets that have local benefits • Conditions to consider climate change on other State and federal funds can go a long way to get local communities to take on adaptation • State should pursue more federal funding opportunities on behalf of locals and regions (e.g., HUD or landscape-scale conservation funding) • Federal mitigation fees should come back to local communities for use in adaptation
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Source: The Authors

Table A2.6: Characteristics, Underlying Causes and Potential Solutions to Address the Disjointed Risk Structure Archetype

Characteristics and Causes	Potential Solutions
<ul style="list-style-type: none"> • The true risk and cost is not borne by those who enjoy the greatest benefit • Disconnect between “the public dollar and the private gain” • Subsidies and incentives to live in risky places, while undermining the ability to collect sufficient funding for adaptation • Interest politics prevent frank and early disclosure of true risks 	<ul style="list-style-type: none"> • Create “benefit districts” wherein people with the greatest capacity pay proportionate fees; fund can be used for district-wide solutions • Privatization of flood risk, but requires careful attention to “climate gentrification” • More incentive programs to implement hazard mitigation measures to lower insurance premiums (assist communities so as to massively expand the uptake of the National Flood Insurance Program’s Community Rating

<ul style="list-style-type: none"> • Institutionalization of disjointed risk structure • Short-term private profit thinking prevails over longer-term community benefit thinking • In addition to risk disconnect (which is essentially a temporal disconnect), there is also a geographic disconnect between resource or commodity producers and users (e.g., watershed stewardship and downstream use; species conservation and ecosystem services) 	<p>System)</p> <ul style="list-style-type: none"> • Establish success metrics of adaptive design in risky locations so investors and developers can see the benefit of investment and long-term planning • Build pay-for-ecosystem-service alliances between urban and rural areas, upstream and downstream local governments to build resource security for some and generate the necessary means to protect those resources for others
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Source: The Authors

Table A2.7: Characteristics, Underlying Causes and Potential Solutions to Address the Inability to Make Economic Case Archetype

Characteristics and Causes	Potential Solutions
<ul style="list-style-type: none"> • Inability to illustrate the need for and benefits of adaptation and to justify the expense for climate adaptation vis-à-vis other budget items • Lack of economic training and expertise among local government staff • Lack of tools to do the requisite economic assessments • Lack of knowledge of what different adaptation aspects might cost • The complexity of adaptation projects (and lack of economic assessment tools to match that complexity) • Lack of metrics of success or performance to help show the benefits of investment and to prioritize adaptation strategies • Bias toward “dollars and cents” as the common denominator in assessments, hindering proper appreciation of non-monetized values • Rules of doing benefit-cost analyses can bias against strategies where benefits only accrue over the long term • Lack of public and political support for long-term investments • Political challenges of dealing with difficult trade-offs 	<ul style="list-style-type: none"> • Advancing research on adaptation costs and benefits • Advances in establishing common sets of metrics of success and performance; development of some metrics at least should be done with financial experts to ensure they hear what they need to be willing to invest • Development of tools, alongside trainings to use those tools in combination with legal requirements to use them would help staff and consultants perform valuations of monetized and non-monetized risks and benefits • Staff trainings in economic assessment tools (particularly in combination with requirements or incentives to use them) • Moving adaptation funding from grant-based, project-based funding to established budget line-item to minimize project-by-project justification need • Foundation investment in tool development and demonstration projects • Support project pre-development phase through dedicated adaptation services to help make the link between public sector adaptation and private-sector investors

Source: The Authors

Table A2.8: Characteristics, Underlying Causes and Potential Solutions to Address the Chronic Underfunding Archetype

Characteristics and Causes	Potential Solutions
<ul style="list-style-type: none"> • General US culture of limited government • Widespread tax aversion across American society • Tax-restricted state since 1978 when Californians voted in favor of Proposition 13 (2/3 majority required to change taxation); taxes come with certain use restrictions • Special fees (50+1 majority required) are easier to raise but are more restricted in use • Chronic insufficiency of local funding and chronic underinvestment in infrastructure • Internal competition for limited general funds • Growing dependence on external grant funding and significant staff time required to write grants • Larger, high-capacity cities and counties tend to have better success rates than smaller, lower-capacity local governments, a self-reinforcing situation • Popular sense that Californians are over-taxed, yet expectation that government should pay for adaptation and functional community services 	<ul style="list-style-type: none"> • Rethink fundamentally and reconsider approaches to local taxation in California • Rethink adaptation fundamentally as widespread community redevelopment into resilient, safer communities • Use existing funds for climate-safe redevelopment creatively and tap/re-purpose existing non-adaptation funding streams (e.g., Clean Air Act, Clean Water Act, agricultural funding sources) • Mainstream climate change adaptation into existing funding streams • Explore more “carrot and stick” approaches to get adaptation done • Access non-traditional funding sources, e.g. international competitions to pilot and showcase potential adaptation solutions • Provide training to become better at accessing state and federal-level funding sources • Integrate training on (institutionalized) racism and how to embed equity into funding applications and adaptation approaches to make systemic changes • Establish relationships with private sector to design innovative financing vehicles • Educate local government staff on how to effectively work with private sector and/or support “boundary organization” navigating between local public sector and international and national private/investment sector • Move money out of unsustainable sectors (subsidies for oil) and move into resilience • Partner with non-profits whereby they apply for funds and do key work on their own and local government’s behalf but don’t lose sight of integrating climate change within all aspects of local government

Source: The Authors

Table A2.9: Characteristics, Underlying Causes and Potential Solutions to Address the Siloed Government Archetype

Characteristics and Causes	Potential Solutions
<ul style="list-style-type: none"> • Silos are pervasive among funding seekers, funding providers, and affect the ability to make the economic case for adaptation • Structure of government is fundamentally at odds with a problem that does not respect sectoral, geographic or jurisdictional boundaries • Lack of clarity on who should lead, who is in control in multi-unit collaborations, and how to include community groups and non-profits • Higher-capacity units may have stronger influence than lower-capacity units • Cultural and administrative differences can make integration and collaboration difficult • Fair distribution of costs, work burdens and benefits are challenging, as is timely distribution of funds throughout the process • Challenge of accounting for and allocating cost and benefits if they do not all accrue within the same administrative unit • Difficult balance between regional integration and local autonomy (home rule) • Politics, differing priorities across jurisdictions and self-interest magnify the problem of silos • Siloed thinking is related problem: issues are being addressed as separate problems (e.g., mitigation and adaptation) even if they are systemically related and considering synergies and trade-off • Funding requests rarely ask for or encourage cross-silo/cross-issue collaborations • Funding seekers always look in the same places for funding and don't coordinate or pool their resources for greater effectiveness, creating "funding ghettos" and missing opportunities for leveraging • Ongoing tasks (e.g., outreach, risk/vulnerability assessments, fundraising and engagement with experts) are repeated countless times, raising ethical concerns and wasting taxpayer money 	<ul style="list-style-type: none"> • Learn from examples that have intentionally overcome siloed governance problems (Measure AA in San Francisco Bay Area; Joint Powers Authorities or looser county-based Task Forces; Community Choice Energy Aggregation; special assessment districts etc., sectors such as water, transportation, forestry, landscape conservation and hazard mitigation that have worked across jurisdictions; examples outside of California) • Use Urban Sustainability Directors Network peer learning funding opportunities for collaboratives • Form and support regional research collaboratives to respond to regional information needs; share data and tools freely • Rewrite grant funding guidelines to incentivize collaboration/give extra points in proposals) • If coordination is required, fund the coordinating entity to support this work • Enable local and regional input into State agency funding allocation decisions • Make better use of regional councils of governments (COGs), regional foundations • Establish fiscally capable regional organization as central organizational entity; engage in transparent priority setting and decision-making • Establish relationships among adjoining communities with significant lead time before applying for federal or State funding • Create sector-based and cross-sector partnerships to improve chances at successful funding application • Provide more grants to regional collaboratives for common work (vulnerability assessments, outreach/stakeholder engagement, education); will help reduce burn-out • Look for solutions that solve multiple problems or have multiple benefits as a starting point for collaborative pilots • Shift the narrative to "shared opportunity"

<ul style="list-style-type: none"> • The bigger the collaboration, the greater the challenges of managing complex projects • Varying capacities, requirements and access to officials (e.g., in work with tribes) or very different organizational cultures, mindsets and functional time scales can inhibit efforts in breaking down silos 	<ul style="list-style-type: none"> • Need big-picture thinkers as leaders of regional, integrated efforts • Streamline regulations and permitting process as well to reduce cost and time of permitting adaptation projects • Integrate adaptation in virtually every job description to make everyone feel responsible for it getting done; educate and train staff (e.g., climate change, funding, systems thinking, social equity)
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Source: The Authors

Table A2.10: Characteristics, Underlying Causes and Potential Solutions to Address the Lack of Capacity (I) Archetype

Characteristics and Causes	Potential Solutions
<ul style="list-style-type: none"> • Many local governments are significantly staff constrained, either due to chronic lack of funds, currently “being in the red,” or not having rebuilt full staff capacity after the recession • Staff must wear many hats; few have the luxury to have a dedicated “adaptation person” • Staff turn-over/retirements of long-term staff is always problematic, but particularly for short-term projects and grants (lack of institutional memory) • Limited staff capacity affects time for looking for funding opportunities, time for writing grant applications, and ability to write competitive applications • Low confidence in ability to succeed with grant writing can undermine the willingness to apply • Burden to apply for small grants (\$20K) is nearly as great as for bigger grants (\$100K) and grant writing requirements can be onerous; work burden may outweigh financial benefit • Grants for capacity building and training or to build up the “development” arm of local government are extremely limited • Expertise in adaptation may be low (even if there is grant-writing capacity) • “Best practice list for adaptation” and greater knowledge in how to quantify cost and benefits of adaptation would make application easier • Difficulty seeing opportunities for leveraging 	<ul style="list-style-type: none"> • Review and reduce onerous grant-writing requirements in State and federal funding (esp. water boards, USACE, Federal Highway Administration); consider stipulating that funds be used in part for internal capacity building • Size-adjust grant-writing requirements (simplify for smaller grants) • Scale up intern and fellowship programs to assist particularly lower-capacity communities • Mandate regular updates to plans (that include adaptation) with assured funding if the updated plan is approved • Provide more block grants as they allow local governments to hire staff for multiple years • Provide more technical assistance and State-sponsored training programs on adaptation, systems thinking, grant writing best practices • Provide and use grant writing services (e.g., external specialized organizations or County-based grant-writing assistance to smaller communities) • Use ARCCA collaboratives or other consortia to build better relationships with scientists to make up for lack of technical expertise • Develop public-private-civic partnerships to help disproportionately burdened and lower-capacity communities overcome initial hurdles and begin to have better access to funding • Create pooled funds (e.g. at the regional level) and streamline application process; specifically

<ul style="list-style-type: none"> • Lack of technical assistance from State and other sources for grant-finding and -writing • Use of outside consultants can be efficient but drains available funds and prevents the building up of internal capacity (vicious cycle of dependence on external expertise) 	<p>task regional entities to administer pool or create capable, sufficiently staffed oversight or financial sponsor organizations willing to take on liability and responsibility to do so</p> <ul style="list-style-type: none"> • General Assistance Programs (similar to EPA’s GAP program for tribes²) should be created for other types of local government • Use the “100 Resilient Cities” as a model and build statewide program • Provide examples of where, when and how more complicated funding mechanisms or public-private funding models were successfully used to support replication/adaptation
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Source: The Authors

Table A2.11: Characteristics, Underlying Causes and Potential Solutions to Address the Discontinuous Funding Archetype

Characteristics and Causes	Potential Solutions
<ul style="list-style-type: none"> • General difficulty of getting longer-term funding • Disasters can free up a lot of money, but is available quickly, unpredictably and is short-term • Pre-disaster hazard mitigation grants are too small to meet the needs • Grants are typically for specific projects and often do not cover all aspects of adaptation-related work, leaving many aspects (e.g., outreach, collaboration) unfunded • Lack of experience with investment funds and financing mechanisms (especially with private sector involvement) • Mainstreaming adaptation expenses into general funds or creating budget line items is possible, but difficult for chronically under-resourced communities 	<ul style="list-style-type: none"> • Provide block grants for longer-term continuous funding • Establish a “Climate Resilience Authority” to aggregate risk and pool risk insurance premiums into a regional fund), set asset retirement obligations over time, invest in regionally significant risk reduction measures (e.g., buy-outs) from funding pool to buy down risk and to administer finances • State should facilitate building relationship with private investors to design innovative funding vehicles for long-term stable funding • Use more “carrot and stick” approaches that link risk reduction measures with funding • Create a long-term vision and intermediate milestones to measure progress against, so that people see progress over time. • Establish post-disaster rebuilding requirements/criteria to ensure adaptation is built into the recovery • Have post-disaster adaptation plans ready to go, so that opportunities of post-disaster funding don’t pass by untapped

Source: The Authors

² See: <https://www.epa.gov/tribal/indian-environmental-general-assistance-program-gap>.

Table A2.12: Characteristics, Underlying Causes and Potential Solutions to Address the Aversion to Innovation Archetype

Characteristics and Causes	Potential Solutions
<ul style="list-style-type: none"> • Funders (particularly in the public sector) view investment in innovative approaches and designs as too risky • Experimentation is stymied • Lack of understanding of the innovation process, and the need for sustained and strategic investment to bring innovative approaches to fruition • Myopic and non-strategic thinking, lack of a long-term perspective, comfort in the status quo and familiar • Lack of understanding that adaptation is required (i.e., traditional approaches won't work anymore) and ongoing • Institutionalization of what is permissible in funding rules and requirements 	<ul style="list-style-type: none"> • Work through the rule-making process at relevant agencies to change funding requirements • Invest in demonstration projects to show what works, what is cost-effective and other lawful co-benefits of innovative ideas • Establish pilot programs, especially to spur innovation and test effectiveness, without immediately requiring wholesale program changes • Provide strong state-level leadership to direct agencies appropriately • Tap into new narratives and values to make the new attractive (rather than a threat to the familiar), e.g., risk aversion to bad things as opposed to risk aversion to new things • Invest much more in outreach to overcome resistance to science, reality of change • Seek out foundations that support innovation to pilot test new ideas • Task certain organizations with identifying innovative, best practice approaches for local governments • State should use and invest in bottom-up, participatory processes (crowd-sourcing, competitions) to generate novel ideas; permitting agencies would need to be at the table from the start

Source: The Authors

Table A2.13: Characteristics, Underlying Causes and Potential Solutions to Address the Funding Biases Archetype

Characteristics and Causes	Potential Solutions
<ul style="list-style-type: none"> • Perception (and often reality) that there is no or only insufficient funding to meet adaptation-related needs • One view that there is more funding for implementation than for earlier and later stages of adaptation • A second (dominant) view that there is more 	<ul style="list-style-type: none"> • Apply a life-cycle funding approach to adaptation, with the ability to go back to the same funder for later needs • Change funding requirements for shovel-ready projects to mandate inclusion of “soft” aspects of adaptation (outreach, engagement, planning, monitoring and evaluation over time) • Look to other models for “whole-project

<p>funding for planning than for implementation</p> <ul style="list-style-type: none"> • Bias toward discrete projects • Bias against broader, programmatic efforts • Bias toward structural adaptation measures (coastal, water, infrastructure), while neglecting human health impacts • Bias against adaptation options that are very expensive and politically contested • Lack of political and public support for expensive and contested adaptation options • Lack of knowledge of what funding sources are available • Lack of clear measures of success and progress for programmatic efforts 	<p>funding” (e.g., California Building Healthy Communities 10-year funding model)</p> <ul style="list-style-type: none"> • Conduct more outreach and education to help communities understand adaptation needs, outlook over the long-term • Conduct cost-effectiveness studies to illustrate effectiveness • Invest in efforts to develop measures of progress and success
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Source: The Authors

Table A2.14: Characteristics, Underlying Causes and Potential Solutions to Address the Happenstance Archetype

Characteristics and Causes	Potential Solutions
<ul style="list-style-type: none"> • Siloed nature of funding sources • Many foundations fund relevant “bits and pieces” but only a relatively small number focus on adaptation • No centralized place to find funding opportunities • Happenstance to find or learn about funding opportunities • Capacity constraints to look for and take advantage of grant opportunities 	<ul style="list-style-type: none"> • Easily navigable clearinghouse of funding opportunities, constantly kept up to date; but fear that it will increase competition for limited funds if more know about them • Host of clearinghouse should have staff capacity to maintain, push out, and do some hand-holding of funding seekers; alternatively work closely with regional collaboratives or regional adaptation assistance centers to support local governments • Need to build up the “development” capacity of local governments, a funded staff assigned to search for grants, assign them to departments and assist technical staff in writing successful applications • Introduce and pass State legislation for PACE-like program for adaptation-related needs (at the level of property owners) • Host California-based foundation summit to help foundations see why adaptation needs to become part of their portfolios • Create a statewide dedicated Climate Adaptation Fund • State and adaptation service providers should provide more technical assistance to local

	<p>governments</p> <ul style="list-style-type: none"> • Use of B Corporations, venture trust funds etc. to launch adaptation initiatives; then get bigger investments from private sector
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Source: The Authors

Table A2.15: Characteristics, Underlying Causes and Potential Solutions to Address the Eligibility Archetype

Characteristics and Causes	Potential Solutions
<ul style="list-style-type: none"> • Lack of clarity on eligibility criteria or application not meeting them • Difficulty understanding grants and application process • Certain types of funding are restrictive and can't be used for adaptation activities (e.g., building back better or using adaptive designs can be prevented by requirements to build back the same) • Existing mandates, rules and regulations may be so narrowly defined and restrictive that adaptive measures can't be integrated and staff can't apply for available funds • Need to patch funding together from multiple sources to compensate for restrictions • Patch-work approach is time consuming and difficult to impossible for staff-constrained communities; undermines implementation of a broader vision • Matching fund requirements can undermine lower-capacity communities' ability to take advantage even where funds are available • If funding applications require a lot of prior planning or development work, timelines and opportunities are missed • Legacies and bad past experiences with certain funders (e.g., regulatory agencies) can bias against repeated application or engagement with funder • Legacies (e.g., being in non-attainment of certain regulations; lack of structural soundness of buildings) can undermine eligibility for grant funding or ability to use certain adaptation strategies 	<ul style="list-style-type: none"> • Add adaptation criteria to existing funding streams and related legal frameworks • Establish dedicated "transition funds" (additional to other funding) so people have the necessary means to move out of old ways of doing things to new ways • Establish a pool of matching funds that small communities can tap into for grants that require them • Update codes, standards and guidelines to incorporate changing conditions and enable mainstreaming adaptation • Strengthen code implementation to ensure adaptation is incorporated • Revisit definition of "disadvantaged", "diversity" and "vulnerability" in State code, CAL Enviroscreen and other grant stipulations, which can be too limiting at the local level • Review CEQA and ensure that it accounts for climate change impacts and makes explicit space for adaptation • Review conditions on mitigation grants and make room for adaptation co-benefits • Add adaptation criteria to GGRF • For communities that prepare separate general and hazard mitigation plans, integrate at the next update to create cost efficiencies and better integration across the community

Source: The Authors

Table A2.16: Characteristics, Underlying Causes and Potential Solutions to Address the Lack of Capacity (II) Archetype

Characteristics and Causes	Potential Solutions
<ul style="list-style-type: none"> • Lack of staff capacity to administer complex or multiple grants; serves as disincentive to apply for funding • Lack of skill in administering complicated funding models • Lack of capacity to implement a project (for a variety of reasons) creates a disincentive to apply for funding • Onerous reporting requirements 	<ul style="list-style-type: none"> • Establish and support capable lead organizations to assist local communities in grant administration or do it for them entirely • Trainings in grant administration • Build staff capacity more fundamentally (see Lack of Capacity I archetype interventions)

Source: The Authors