

Designing Consolidations Tool Kit

Welcome! This tool kit is designed to accompany the UCLA Luskin Center for Innovation [Designing Water System Consolidation Projects Guide](#) and Water System Entity Statutory Review (see Appendix A of guide). Here we feature our compilation of different exercises and resources intended to help stakeholders put the information provided into action. Each “tool” is presented as a stand-alone exercise targeting a specific phase or component of consolidation discussions as described below. We have included instructions for their use as we envisioned them but also encourage you to adapt and combine them to suit your own unique needs. Whether you are considering the feasibility of consolidation, discussing or fine-tuning a consolidation proposal, or implementing a consolidation project, we hope these resources assist you in designing the most locally beneficial solution possible. For questions, suggestions or assistance in using this tool kit, please contact Dr. Kristin Dobbin at kdbobbin@berkeley.edu.

Tool kit contents

- [Exploring potential partners](#) - This worksheet walks stakeholders through the process of identifying potential partners for consolidation. Use this tool if you are considering consolidation for the first time or if you are in the early stages of designing a consolidation project to make sure all potential partners are considered and included.
- [Identifying promising approaches](#) - This worksheet helps identify promising approaches for structuring a consolidation project based on the key challenges facing your community (now or in the future). Use this tool if you or others in your community have just started thinking about the prospect of consolidation or are unsure if consolidation is a good option for you.
- [Guided discussion questions](#) - Discussion questions organized thematically by the nine considerations covered in the guide. Use this tool to foster productive conversations among stakeholders anytime after one or more consolidation alternatives have been identified.
- [Evaluation tool for consolidation proposals](#) - An evaluation tool for consolidation proposals structured around the nine considerations presented in the guide. Use this tool to dig into the strengths and limitations of a specific consolidation proposal under consideration.
- [Side by side comparison tool](#) - A worksheet designed to directly compare two consolidation proposals using the nine considerations presented in the guide. Use this tool when you are trying to choose between consolidation alternatives or narrow down options.

Exploring potential partners

As discussed in the guide, consolidation is not a plausible solution for all communities. A critical first step in considering the feasibility of consolidation for any community, then, is to identify potential partners.

Step 1: Use the State Water Board [drinking water system outreach tool](#) or another mapping tool to identify drinking water systems in your area. The size of the area you consider may vary depending on your location. In a more populated area, you may decide to only look one mile in each direction. In a less populated area it may be necessary to look five, ten or even twenty miles away to identify any or a few potential partners. As you search, fill the name of each identified water system (and Public Water System ID (PWSID) if available) in the left-hand column in the table below.

Note: In addition to public water systems, consolidation projects can encompass domestic well communities, state small water systems and Tribal communities. Although there are not ready-made maps to identify these communities, where applicable, these potential partners should also be included on the below list for consideration.

Step 2: Next, using the resources listed below. Fill in as much information as possible about each of these potential partners. Relevant information about California Public Water Systems can be found using the [Drinking water system outreach tool](#); [Drinking water watch](#); [Needs assessment dashboard](#); and the [DAC mapping tool](#)

Water system name and PWSID	Rough distance	Water source	Population served	System Governance (see guide pages 11-17)	DAC or SDAC?	Risk assessment category

Identifying promising approaches

Consolidation offers many potential benefits, including opportunities to increase Technical, Managerial and Financial (TMF) capacity, grow more efficient, build resilience, access new, safe water sources and secure and maintain adequate staffing among many others. However, as discussed at length in the designing water system consolidation projects guide, how collaboration is structured between two or more water systems/communities greatly influences the type and extent of benefits any given consolidation will achieve.

This tool identifies common water system challenges that consolidation is particularly well positioned to address and provides insight on the consolidation structures that may be most helpful for each. Before getting started consider re-reading pages 7-10 of the guide for a refresher on these structures.

Step 1: In the middle column, identify which, if any, of the common challenges listed in the leftmost column apply to your community now, or that you anticipate may occur in the future.

Common challenges	Relevant to your community now or could be in the future?(circle yes or no)	Potential consolidation approaches
Trouble recruiting and maintaining staff or board members	Yes No	Merger (physical or managerial), Acquisition (physical or managerial)
Trouble meeting monitoring and/or reporting requirements (e.g. electronic annual report, CCR)	Yes No	Merger (physical or managerial), Acquisition (physical or managerial)
Water rates are unaffordable for many residents	Yes No	Merger (physical or managerial), Acquisition (physical or managerial)
Unable to afford treatment costs or needed infrastructure/technologies	Yes No	Merger (physical or managerial), Acquisition (physical or managerial), Umbrella organization (physical or managerial)
Limited financial reserves for planned or emergency repairs	Yes No	Merger (physical or managerial), Acquisition (physical or managerial)
Water quality does not meet federal and state standards due to source water challenges	Yes No	Merger (physical), Acquisition (physical), Umbrella organization (physical)
Water quality does not meet federal and state standards due to operational challenges	Yes No	Merger (physical or managerial), Acquisition (physical or managerial), Umbrella organization (physical or managerial)
Water supply and/or storage capacity is		Merger (physical), Acquisition

inadequate	Yes	No	(physical), Umbrella organization (physical)
Water source is vulnerable to climate change impacts (e.g. drought, fire)	Yes	No	Merger (physical), Acquisition (physical), Umbrella organization (physical)
Fire suppression capabilities of system are limited or non-existent	Yes	No	Merger (physical), Acquisition (physical), Umbrella organization (physical)
There are important gaps in existing communities services (other than drinking water) that the current drinking water provider is unable to provide (e.g., wastewater, street sweeping, trash)	Yes	No	Merger (physical or managerial), Umbrella organization (physical or managerial)

**Note:* There are many benefits of consolidation that go beyond addressing the challenges identified here. As such, if none of the listed challenges apply to your community, considering consolidation may still be advantageous. We suggest that you reach out to a Technical Assistance Provider or the state water board SAFER unit to discuss. Further, as is made clear in the Consolidations Guide, the specific design of each approach will influence the way/degree in which these challenges are addressed. The potential approaches identified here are only a suggested starting point for designing a consolidation that best suits local needs and priorities.

Step 2: In the table below, tally the number of times each consolidation approach is identified as relevant for the challenges you selected as relevant to your community. For example, if you selected “water source is vulnerable to climate change impacts” as a current or potential future challenge, place one tally in each of the three physical consolidation approach boxes then repeat for all other relevant challenges you selected.

Consolidation approach	Physical merger	Managerial merger	Physical acquisition	Managerial acquisition	Umbrella organization with physical interconnection	Umbrella organization without physical interconnection
# times identified above						

Step 3: Prioritize potential approaches for consideration by listing the three approaches with the most tallies from Step 2 in descending order (most selected, second most selected, third most selected).

- 1.
- 2.
- 3.

Discussion questions by consideration

General powers and authorities

- What local powers and authorities will be gained under the proposed consolidation?
- What local powers and authorities will be lost under the proposed consolidation?
- Does the proposed consolidation have all of the necessary powers and authorities to carry out the desired functions?
- What powers or authorities are not needed now but may be needed in the future? Are these addressed by the proposed consideration? If not, what would be required to make the needed changes?

Implications for other services and powers

- Do any of the consolidation partners provide services other than drinking water? If so, how will these services be performed after consolidation?
- Could the proposed consolidation result in other changes likely to impact residents (e.g., zoning, ordinances, assessments)? How might these changes be received by the broader community?

Financial features

- Will the consolidated water system have the necessary authorities to raise needed revenue for operation and capital improvements?
- How will water rates be determined?
- Are there any relevant restrictions to how water rates are determined or designed?

TMF capacity

- Is there enough staff and volunteer capacity to implement and operate the consolidation proposal now and in the future?
- Will the proposal consolidation create operational or managerial redundancies? How might these be reduced?
- What technical capabilities/certified staff will be needed to operate the proposed consolidation? Are sufficient staff available?

Affordability

- How will the proposed consolidation impact water rates?
- Are the potential water rate impacts a direct result of consolidation or are they the result of existing or future needs that would need to be addressed with or without consolidation (e.g., deficient or aging infrastructure, inadequate water pressure, installation of water treatment to meet regulatory standards)?
- How will rate changes impact low-income residents specifically?
- Will the consolidated system have a low-income rate assistance program?
- What resources or programs would be available to residents in the consolidated system to help make rates affordable?
- What are/will be the policies of the consolidated system for nonpayment?

Representation and transparency

- How will the consolidated water system be governed? Who will make decisions related to system management, policies and rates etc. and how?
- Which residents are not directly represented by the proposed governance structure? Can this be addressed?
- How can residents served by the consolidated system interact with decision-makers and hold them accountable?
- What transparency requirements will the system be subject to?

Flexibility and administrative transaction costs

- Which regulators need to approve the proposed changes to enact the consolidation?
- What is required to implement the consolidation proposal? How long will these steps take?
- Are there fees associated with these processes? Are fee waivers available?
- Can changes to the structure and governance of the consolidated system be made in the future? How?

Sustainability and climate resilience

- Will the proposed consolidation add water sources or increase the system's storage capacity?
- Will the consolidation project result in upgrades, repairs or improvements to key infrastructure?
- Will the proposal help build financial reserves for emergencies and ongoing maintenance?
- Will the consolidation project meet and/or increase fire protection needs?

Access to safe, reliable drinking water

- Will the consolidation proposal increase access to safe drinking water in the region?
- Will the consolidation proposal increase access to affordable drinking water in the region?
- Have all feasible communities been asked to participate? (Double check using the State Water Resources Control Board's [water system outreach tool](#))
- How can the voices of those impacted by legacies of discrimination in land use planning and water infrastructure investments be centered?

Evaluation tool for consolidation proposals

Water system consolidations can be pursued in many different ways. Depending where you are in the consolidation process, your proposal might be conceptual, with relatively few details, or you may have already conducted a detailed feasibility study. Either way, this evaluation tool can help you understand and communicate the implications of the proposal and maximize the potential benefits. We highly recommend that you consider completing parts two and three of this exercise several times to evaluate a spectrum of options across the structural and governance alternatives presented in the guide.

Step 1: Define community and region specific challenges and priorities by answering the following question.

1. What are the most pressing drinking water challenges facing your community today?
2. What, if any, potential future challenges might impede safe and sustainable drinking water provision in your community in the future?
3. What would you most like to accomplish through consolidation? What benefits are most important to ensure?
4. What are the most pressing drinking water challenges facing other communities in your region?

Step 2: Describe the consolidation proposal you wish to evaluate with this tool including the structure (umbrella organization, merger, or acquisition) and governance structure. The more details you can include the easier it will be to evaluate the proposal.

Step 3: For each of the nine considerations in table below, assign the proposal described above a rating of positive (+), neutral (0) or negative (-) based on how it compares to your current drinking water situation (in other words, a non-consolidation future). Use the notes/questions box to record questions, uncertainties or other relevant observations. As you score each consideration, it might be helpful to refer to the water system entity statutory review and the discussion questions handouts presented previously in this tool kit.

Consideration	Description (see guide for more discussion)	Consolidation alternative rating (+/0/-)	Notes/questions
Scope of powers and authorities	Every type of governance structure has some distinct powers (e.g., wastewater provision, fire protection, eminent domain) that make it unique. Stakeholders need to carefully consider these powers when contemplating a merger, with an eye to the future to make sure the chosen consolidated entity will have the necessary powers for the system to continue to thrive.		
Implications for other services and powers	Some types of water systems can provide other key services like fire protection or wastewater treatment. Others cannot. Similarly, changing water system governance can introduce new ordinances, assessments or taxes that impact residents. Thus, water system consolidations need to be designed with careful attention to the non-water implications as well.		
Revenue and cost features	Not all water systems have equal financial duties and privileges. Publicly owned water systems are bound by Proposition 218 to set water rates at the cost of delivering the service. IOUs have more discretion in setting rates but must get		

	approval from the CPUC to change them, and all privately held systems cannot levy assessments or issue bonds in the same manner as publicly owned systems can.		
TMF capacity	While consolidations often increase TMF capacity, not all approaches do so equally. When possible, stakeholders should be careful to avoid consolidations that unnecessarily increase complexity, which can lead to decreased TMF capacity long-term.		
Affordability	The design of a consolidation project can influence water rates in a variety of ways, including potentially necessitating large-scale investment in infrastructure and possibly introducing new taxes. These impacts should be assessed across different income groups and constituencies. Availability of state or federal grants or financing may also influence affordability post-consolidation. Similarly, the governance of the consolidated system influences both how water rates are set and how customers can engage in rate-setting.		
Representation and transparency	Publicly owned entities are subject to transparency laws such as the Brown Act and the Public Records Act. However, they restrict voting rights to those with U.S. citizenship. IOUs, on the other hand, are not directly governed by their customers at all, although some transparency measures are in place through CPUC oversight. MWCs often restrict participation in decision-making to homeowners. Precisely because representation and local control are often key concerns among residents contemplating consolidation, carefully attending to representation is essential in making any consolidation project a success.		
Flexibility and administrative transaction costs	Certain approaches to consolidation require more time and resources to implement, such as regulatory approval and/or resident elections, whereas others may be easier (e.g., executing a JPA among various public agencies). Yet it is also important to look to the future. In the long term, some approaches allow for more flexibility and/or stability, meaning that savings may materialize in the long run.		

Sustainability and climate resilience	Consolidation presents a unique opportunity for small and rural systems to be stronger in the face of challenges posed by climate change including by increasing the number or diversity of local water sources. However, like all other benefits, increased sustainability and resilience are not a guaranteed outcome of consolidation but rather need to be planned for and intentionally fostered.		
Access to safe, reliable, affordable drinking water	Consolidations should increase access to safe, affordable drinking water and include as many partners as possible, particularly those most impacted by legacies of discrimination and historically marginalized in water planning.		

Step 4: Answer the following questions to reflect on the results.

1. What are the strengths of the above evaluated consolidation alternative?
2. What are the drawbacks of the above evaluated consolidation alternative?
3. Does the proposal address the challenges facing your community and achieve the desired benefits as described in Part One?
4. Does the proposal achieve benefits in addition to those prioritized in Part One?
5. How might the proposed consolidation achieve more benefits for participating communities?

Side-by-side comparison tool

Water system consolidations can be pursued in many different ways. While the potential benefits and reasons for consolidating may be similar across the different approaches, each also offers unique advantages and disadvantages, often with tradeoffs between them. These differences merit careful consideration and discussion. Use this tool to compare two specific consolidation proposals. If you are considering more than two alternatives, we encourage you to repeat this exercise several times. Those in the early stages of developing conceptual proposals may also find it beneficial to compare alternatives representing each type of consolidation structure (umbrella organization, merger or acquisition).

Step 1: Define community and region specific challenges and priorities by answering the following question.

1. What are the most pressing drinking water challenges facing your community today?
2. What, if any, potential future challenges might impede safe and sustainable drinking water provision in your community in the future?
3. What would you most like to accomplish through consolidation? What benefits are most important to ensure?
4. What are the most pressing drinking water challenges facing other communities in your region?

Step 2: Describe the two consolidation proposals you wish to evaluate including how the consolidation will be structured (umbrella organization, merger or acquisition) and governed. The more details you can include the easier it will be to evaluate the proposal using the guide criteria.

Proposal A:

Proposal B:

Step 3: For each of the nine considerations in the table below, place a “1” in the column of the proposal that fares better for each listed consideration. For example, if Proposal A lacks one or more powers that may be desirable whereas Proposal B has all the desired powers, in the general powers and authorities row you would place a “1” in the Proposal B column and leave Proposal A column blank. If the two proposals are tied, leave both columns blank. Once you have scored each of the nine considerations, total the sum of each column in the final row. As you score each consideration, it might be helpful to refer to the water system entity statutory review and discussion questions handouts in the guide tool kit.

Consideration	Description (see guide for more discussion)	Proposal A	Proposal B
Scope of powers and authorities	Every type of governance structure has some distinct powers (e.g., wastewater provision, fire protection, eminent domain) that make it unique. Stakeholders need to carefully consider these powers when contemplating a merger, with an eye to the future to make sure the chosen consolidated entity will have the necessary powers for the system to continue to thrive.		
Implications for other services and powers	Some types of water systems can provide other key services like fire protection or wastewater treatment. Others cannot. Similarly, changing water system governance can introduce new ordinances, assessments or taxes that impact residents. Thus, water system consolidations need to be designed with careful attention to the non-water implications as well.		
Revenue and cost features	Not all water systems have equal financial duties and privileges. Publicly owned water systems are bound by Proposition 218 to set water rates at the cost of delivering the service. IOUs have more discretion in setting rates but must get approval from the CPUC to change them, and all privately held systems cannot levy assessments or issue bonds in the same manner as publicly owned systems can.		
TMF capacity	While consolidations often increase TMF capacity, not all approaches do so equally. When possible, stakeholders should		

	be careful to avoid consolidations that unnecessarily increase complexity, which can lead to decreased TMF capacity long-term.		
Affordability	The design of a consolidation project can influence water rates in a variety of ways, including potentially necessitating large-scale investment in infrastructure and possibly introducing new taxes. These impacts should be assessed across different income groups and constituencies. Availability of state or federal grants or financing may also influence affordability post-consolidation. Similarly, the governance of the consolidated system influences both how water rates are set and how customers can engage in rate-setting.		
Representation and transparency	Publicly owned entities are subject to transparency laws such as the Brown Act and the Public Records Act. However, they restrict voting rights to those with U.S. citizenship. IOUs, on the other hand, are not directly governed by their customers at all, although some transparency measures are in place through CPUC oversight. MWCs often restrict participation in decision-making to homeowners. Precisely because representation and local control are often key concerns among residents contemplating consolidation, carefully attending to representation is essential in making any consolidation project a success.		
Flexibility and administrative transaction costs	Certain approaches to consolidation require more time and resources to implement, such as regulatory approval and/ or resident elections, whereas others may be easier (e.g., executing a JPA among various public agencies). Yet it is also important to look to the future. In the long term, some approaches allow for more flexibility and/or stability, meaning that savings may materialize in the long run.		
Sustainability and climate resilience	Consolidation presents a unique opportunity for small and rural systems to be stronger in the face of challenges posed by climate change including by increasing the number or diversity of local water sources. However, like all other benefits, increased sustainability and resilience are not a guaranteed outcome of consolidation but rather need to be planned for and intentionally fostered.		
Access to safe, reliable, affordable drinking water	Consolidations should increase access to safe, affordable drinking water and include as many partners as possible, particularly those most impacted by legacies of discrimination and historically marginalized in water planning.		
TOTAL			

Notes:

Step 4: Answer the following questions to reflect on the results.

1. Which proposal has the higher score and how significant is the difference?
2. Which proposal best addresses the challenges facing your community and achieves the desired benefits as described in part one?
3. Are there ways that either proposal could be adjusted to increase the potential benefits across one or more consideration categories? For example, by changing the governance type for the consolidated system(s) or the proposed structure.