

**National Association of Clean Water Agencies**  
**Annotated Draft Guiding Principles\***  
**For Financial Capability Assessment of Clean Water Programs**

**Purpose**

The National Association of Clean Water Agencies (NACWA) has led the wastewater industry in advocating the development and implementation of water-quality policies that are grounded by practical insights and technical expertise. In 2005, NACWA published its White Paper: *Financial Capability and Affordability in Wet Weather Negotiations* that provides a critical review of the US Environmental Protection Agency (EPA) Financial Capability Assessment (FCA) guidance documents, and delineates additional policy considerations to mitigate adverse economic impacts of Clean Water Act enforcement practices. Referencing that White Paper, EPA's Assistant Administrator for Water has called for a thorough review and revision of the FCA. This set of annotated Guiding Principles builds upon that White Paper by outlining principles to guide revisions to financial capability assessment practices, and by delineating economic considerations that wastewater agencies may appropriately highlight during negotiation of Clean Water Act enforcement measures.

**Definitions**

*Financial capability is the relationship between a community's<sup>†</sup> economic condition and the investments needed to make water quality-related improvements. A community's ability to pay for these needed improvements is determined by its existing and potential economic situation. Based on an assessment of a community's economic situation, the scope of any improvements and the timeframe for making the improvements is determined.*

**Discussion:** While this definition is bounded by consideration of capacity to finance water-quality improvements, these same communities are subject to competing claims on resources for other environmental investments (e.g. air quality improvements) as well as a full spectrum of public and social services. Therefore, this definition implicitly defers the question of financial capability to finance a spectrum of community investments and the inherent questions of priority across competing community objectives. Further, insofar as this definition is prospective in its perspective, it defers the question as to whether financial capability for further water-quality investment is a function, in part, of past investment histories. Given competing community priorities, not only may a community's 'existing and potential economic' situation warrant consideration, but also the extent to which it has already invested in water quality.<sup>‡</sup>

**Affordability** for individual utility ratepayers relates to whether customers can pay their utility bills without undue hardship or unreasonable sacrifice in their life style or in their essential spending patterns.<sup>§</sup>

**Discussion:** While the EPA Financial Capability Assessment guidance does not address issues related to the affordability of service for individual utility ratepayers, wastewater agencies – as vital economic actors in their communities – carry important responsibilities to ensure access to services required for basic human health and sanitary needs. As a consequence, these guiding principles address not only the imperative to enhance assessment of community

---

\* Guiding principles as developed in advance of the 2006 NACWA summer conference are presented in *italics*.

<sup>†</sup> The term "community" is intended to include all wastewater entities, regardless of governance type (city, county, regional provider, special district, etc.).

<sup>‡</sup> For example, to the extent that Chicago's TARP program or San Francisco's \_\_\_\_\_ program represent substantial and seminal past investments, enforcement actions based on prospective assessment of financial capability denies recognition of previous investments and communities' competing claims on limited resources.

<sup>§</sup> Drawn from a forthcoming Water Environment Federation Special Publication focused primarily on low-income assistance program planning and implementation considerations.

financial capability but also considerations for individual, particularly low-income, ratepayers. It is impossible to separate the impact of rising wastewater use charges from the stress of other economic demands upon the individual citizen.

## **Economic Capability**

1. *The first consideration in a financial capability assessment must be the community's economic situation.*

- *Prescriptive formulas for calculation of financial capability and thresholds for expenditure (e.g., median household income or MHI) are just one indicator of a community's ability to afford a particular program.*

**Discussion:** Prescriptive formulas for calculation of selected financial benchmarks are useful for framing the nature of considerations for assessment of financial capabilities. Current FCA guidance provides tenable litmus tests as to whether low median household incomes suggest limitations on potential rate and fee increases to fund water quality improvements and as to whether poor community financial performance metrics suggest limitations on local debt financing capacity. Yet, contrary to EPA enforcement practices in numerous cases, these barometers are *sufficient but not necessary conditions*<sup>\*\*</sup> for determining that potential program costs represent burdens requiring mitigation through schedule (or program requirements) relief. Many communities may pass these litmus tests and yet not be in position to financing water-quality improvements without either imposing untenable burdens or deferring other, more beneficial, environmental investments.

- *Local conditions (e.g., scheduled water rate increases, rising energy costs, population and employment projections, low-income population percentage, construction market, shelter costs etc.) are the primary factors in determining economic capability. Criteria must be developed to incorporate site-specific local conditions into the capability analysis.*

**Discussion:** Recognition of the **primacy** of local conditions in determining financial capability would represent a significant advance toward optimization of water-quality investments and significant departure from current practice. However difficult, as discussed below, this is **required** to effectively assess community financial capability. In the same way that personal capabilities to finance selected investments is driven by a plethora of (non-income related) individual circumstances including family wealth, dependent care requirements, essential service costs, and so on -- the same is true for communities. However, not only is it required to recognize that a number of local conditions are primary factors, equally daunting is the fact that the relative importance of these factors differs from community to community and region to region. Potential adverse economic development considerations are much more pronounced in 'rust belt' communities than the booming southwest; shelter costs are much more problematic in Hawaii and California than the Midwest. Accordingly, the very consideration of local conditions may not be prescriptive but must be tailored to reflect prevailing economic imperatives.

Enabling flexibility and recognition of economic outlook in enforcement actions would also help preclude nonsensical determinations of financial capability that arise from myopic allegiance to prescriptive formulas. For example, the current FCA guidance would suggest that for

---

<sup>\*\*</sup> For all intents and purposes, enforcement practices have defined these litmus tests, in combination, as necessary conditions for a finding of high burden warranting schedule relief. Central to these guiding principles is the thesis that financial capability can not be construed as a threshold defined by reference to selected financial benchmarks but rather is a function of a broad array of (mostly local) factors. Therefore, the magnitude and pace of water-quality investments must reflect these factors.

***DRAFT – FOR DISCUSSION PURPOSES ONLY – DO NOT CITE OR QUOTE***

communities with strong financial performance indicator scores, there is no program cost that would present a high burden. While well heeled communities certainly are likely to have greater capabilities to finance water-quality improvements, this capacity is undoubtedly not infinite. In practice, the spurious outcomes that would suggest that Atlanta's near \$4 billion program or NEORSD's over \$3 billion program do not present high burdens lends credence to the contention that prescriptive formulas, without adequate consideration of local factors, is untenable.

*A framework or structured procedure should be established for evaluating local conditions to ensure a degree of national consistency. However, the framework must allow the specific local conditions to ultimately define the schedule and cost incurred for any particular program.*

**Discussion:** As noted, tailoring analyses to site-specific local conditions may exacerbate inconsistencies in national enforcement practices already plagued by variances in interpretations of policy across EPA regions and personnel. As a consequence, a framework that is transparent, auditable and sufficiently flexible to accommodate a broad range of considerations is required.

In many respects, the evaluation requirements are typical of public resource investment decision-making wherein there are multiple program attributes that must be balanced across different, often competing, objectives. These circumstances suggest that potential value of formal prioritization methodologies (that have been, for example, successfully employed for 'portfolio management' of financial resource decisions). In the attached Appendix A, a draft structure for prioritization of water-quality investment schemes is offered.

2. *Economic capability for clean water programs must be assessed in light of other investment demands and potential environmental benefit.*

**Discussion:** Investment decisions, whether to manage personal wealth or community resources, may not be made without consideration of available alternatives. In the same manner that individuals that do not consider equity instruments (stocks) will likely fail to optimize their investment decisions, local governments carry a fiduciary responsibility to invest community resources so as to maximize returns (in the form of community benefit) at acceptable levels of risk. The current EPA FCA guidance is founded on the view that discreet measures of community resources (e.g., median household incomes, community financial indicators) may, in isolation, define capability to finance water-quality investments. However, for those communities where dedication of limited available resources for certain water-quality investments will preclude investments that will convey more substantial benefit, enforcement actions impose illogical decision drivers. Even if restricted to environmental investments subject to EPA enforcement, water-quality investments should be prioritized across the spectrum of options that include investments in air quality, drinking water quality, wetland preservation, and so on.

- *Water quality-related investments should be viewed holistically as components of a community's overall environmental investment (i.e., CSO, SSO, Stormwater, TMDL programs).*

**Discussion:** A derivative of the general principle of the fiduciary responsibility to manage a community's 'portfolio' of resource investment options (noted above) is the recognition that within the spectrum of water-quality related investments, proper representation and prioritization of available options can only occur when considered from the holistic view of total watershed management. In the same manner that decisions to invest in stocks or bonds are not optimized by reference to projected returns of individual instruments but rather by balancing

***DRAFT – FOR DISCUSSION PURPOSES ONLY – DO NOT CITE OR QUOTE***

risks and returns of one's portfolio of investments, benefits of such water-quality investments would not be properly considered in isolation.

In practice, given the potential imperative to address each major potential source of pollutant loading to receiving waters, a holistic view suggests the importance of prioritization of investment options, within budget and timing constraints, based on prospective environmental benefit – as opposed to the simple sequencing of enforcement actions. Agencies faced with the prospect of enforcement actions may rightfully assert that limited resources ought to be applied to those investments yielding greatest benefit per dollar of investment first, with less well performing options requiring deferral. The joint considerations of “time” (schedule) and “money” (extent of program improvements) cannot be separated in an evaluation of economic impacts upon individuals and the community.

- *A utility has a fiduciary obligation to utilize its limited resources in such a way as to maximize the benefit to its community, so water quality-related projects must be prioritized within that larger context, based on cost effectiveness.*

**Discussion:** As noted above, cost effectiveness must be considered holistically in the context of available investment alternatives and the interaction of a portfolio of investment options to achieve environmental benefit. Cost effectiveness, then, is fundamentally about prospective benefit relative to costs incurred where a necessary condition is for benefit to exceed associated costs. However, cost effectiveness is not established solely by benefit/cost ratios greater than one. It is not ‘cost effective’ for one to make an investment that yields benefits fully two times greater than associated costs if such a resource allocation will render unavailable an investment of equivalent resources that will yield 3 benefits three times greater than associated costs. Rather than being an absolute measure, cost-effectiveness is a relative measure, requiring consideration of other available alternatives.

3. Environmental improvements should be structured so as to mitigate the potential adverse impact of their cost on distressed populations.

**Discussion:** Consistent with a view that the FCA is intended to provide a static review of the availability of community resources, not an evaluation of the distribution of associated burden on sub-populations, the current FCA guidance is effectively silent on the implications of potential adverse impacts of program implementations on distressed populations. Just as individuals responsible for disadvantaged relatives whose care and support divert available resources and limit financial capability to make other investments, communities’ financial capabilities can not be divorced from the public challenges presented by distressed populations.

In addition to the fact that addressing the needs of distressed populations may, in fact, limit the total resource pool available to make water quality investments, mitigation of potential adverse impacts of water quality investments should include, and extend beyond, rate design and targeted programs to facilitate low-income assistance<sup>††</sup>. Environmental justice considerations, therefore, are appropriate to incorporate in site and schedule determinations of program requirements.

---

<sup>††</sup> Rate design options include a variety of methods to provide distressed populations access to wastewater services at subsidized costs; programmatic measures are discussed in a forthcoming WEF special publication.

## **Program Scope and Timetable**

*The scope of and implementation schedule for water quality-related improvements must be tailored to the affected community's unique financial condition.*

- *Water quality-based improvement programs must be designed to maximize water quality benefit while maintaining a healthy economic balance for the community.*
- *The appropriate pace of environmental investments cannot be prescribed (e.g., 20 years) but rather must reflect the community's financial capabilities and investment alternatives.*
  - *There is no legislative limitation on extended implementation schedules. Regulatory limitations, to the extent they exist, can be addressed and overcome.*

*Considering financial capability in light of other investment demands and potential environmental benefits ensures that the greatest water quality improvement is obtained at the earliest possible time.*

**Discussion:** While the discussions above have addressed many program scope-related issues, similar considerations govern questions of implementation schedule. In particular, not only is there no legislative limitation on schedules, but it is important to note that arbitrary schedule prescriptions invite sub-optimization of investment resources. Implementation schedules should reflect investment priorities to preclude funding of projects that convey lower environmental benefit per dollar of expenditure rather than other more affective alternatives simply to meet arbitrarily prescribed schedules. Further, schedule variances should be evaluated in the same context as project options – in terms of the benefit or costs associated with advancing or deferring program implementation. Fundamentally, schedule imperatives should derive from the notion that the benefits that accrue from scheduling projects earlier exceed the opportunity costs of deferral. While there is certainly a slippery slope of which to be mindful (e.g., what harm will it do to defer a project another year? And then another?), requirements for accelerated scheduling of program investments, particularly those that will impose significant financial burdens, should be justifiable on the basis that more relaxed scheduling requirements would result in relatively less net benefit.