City of Los Angeles Sewer System Management Plan (SSMP)

Attachment D2

Capital Improvement Program (CIP)
Project Prioritization Criteria Definitions

OVERVIEW

This document provides further description and guidance for the criteria presented in Section 12 of the business case that LA Sanitation (LA SAN) will use to evaluate capital projects.

In order to consistently score and prioritize projects, guidance must be provided so that staff involved in the process including project managers, department managers, and review committee members can consistently rank and score proposed capital needs both within and across various departments. By developing criteria that specifically reflect the impact of each project, LA SAN can better review, evaluate and prioritize the entire group of projects under consideration for the annual CIP.

The evaluation criteria incorporate both qualitative and quantitative thinking, and will greatly assist LA SAN in ranking and scoring capital projects through a common set of criteria. The guidelines will be helpful in discussing and determining a final consensus on project priority based on formal scoring from 1-5, for areas that may otherwise may be somewhat subjective. We would also like to note that these criteria can be adapted over time as the business drivers for LA SAN change. The project scoring is meant as a final prioritization and analysis step, building upon the ongoing asset management and other programs that are a source of input into the CIP development process.

Details on the scoring are contained below and are drawn from both industry experience and best practice tailored to reflect LA SAN specific drivers and issues. Sample analysis is demonstrated in Figure 1 and will be supported by an Excel scoring tool to be provided in future workshops.

- 1. Physical Condition
- 2. Performance/Process Condition
- 3. Regulatory/Environmental
- 4. O&M and Service Level/Reliability
- 5. Safety
- 6. Public Benefit/Perception and Community/Growth
- 7. Financial
- 8. Efficiency/Energy and Process Effectiveness/Institutional Knowledge

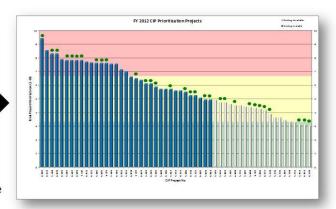


Figure 1 - Sample Project Priority Analysis



PROJECT CRITERIA AND PRELIMINARY WEIGHTINGS

There are eight (8) individual criteria that will be scored for each proposed project to determine its overall priority. LA SAN should review the information and recommended scoring contained in the business case in addition to information presented by project owners or sponsors to determine the most appropriate score for each criterion. Final scores may also factor in the relative merits of the project in comparison to other proposed CIP projects.

The table below lists the eight (8) criteria with an initial set of weightings for each that was reviewed and finalized during the previous workshop. The weightings will be based on discussions with LA SAN in September/October 2014.

	Criteria	Preliminary Weighting
1	Physical Condition	16%
2	Performance / Process Condition	15%
3	Regulatory / Environmental	15%
4	O&M and Service Level / Reliability	12%
5	Safety	16%
6	Public Benefit/Perception and Community / Growth	7%
7	Financial	11%
8	Efficiency / Energy and Process Effectiveness / Institutional Knowledge	8%
	TOTAL	100%

DETAILED PROJECT SCORING CRITERIA

The tables below contain more detailed information and guidance for scoring each criterion, including overall considerations and specific examples for 1-5 ratings.



1. PHYSICAL CONDITION CRITERIA (CRITERIA WEIGHTING - 16 %)

PHYSICAL CONDITION

The physical condition is a mechanism to assess the probability of failure for a collective group of assets in a project. It is the current physical state of repair and operation for a collective group of assets included in a project. Condition scores should be based on documented observation of physical and operational condition as reflected by: **service/operating conditions, historical maintenance, and overall age**. When applying scores, consider probability of asset failure should the proposed project not be implemented and the existing assets continue to deteriorate.

For aging infrastructure projects:

- Plant Projects Evaluation is typically based on results of visual condition assessment, historical data (age, break history) and/or feedback from O&M staff, and may also include more advanced condition assessment where available (i.e. non-destructive testing, oil sampling, vibration analysis, thermography, etc.)
- Collection Projects Evaluation is typically based on results of visual condition assessment (manholes), CCTV data (for gravity sewers) such as cracked/collapsed/broken pipe, offset joints, evidence of inflow and infiltration, renewal and replacement planning (gravity & force main), if available, feedback from O&M staff, may include more advanced condition assessment where available (i.e. acoustic, magnetic flux leakage, broadband electromagnetic etc.)

For non-aging infrastructure projects, condition score would be determined based on internal or external consulting studies and/or information contained in reports and business cases.

For projects where formal condition assessment information is available (typically aging infrastructure projects), initial scoring should be based on an average physical condition scores for all assets included in the project. Adjustments can then be made to reflect the aggregated project, and supporting justification should be provided in the prioritization analysis section of the business case.

SCORE	CRITERIA	
5	Overall Rating – Very Poor • Effective life exceeded and/or excessive level of maintenance required • A high risk of breakdown or imminent failure with serious impact on performance • No additional life expectancy with immediate replacement or rehabilitation needed • Could initiate immediate funding request due to "Urgent Necessity" in the near term • Replacement or major rehabilitation needed immediately	
4	Overall Rating – Poor Functions but requires a high level of maintenance to remain operational Shows abnormal wear and is likely to cause significant performance deterioration in the near term Replacement or major rehabilitation needed in the short term Meets Sewer Condition Category D 	
3	Overall Rating – Moderate Functionally sound and acceptable and showing signs of normal wear May have minor failures or diminished efficiency and with some performance deterioration Moderate renewal or rehabilitation needed in the short term Meets Sewer Condition Category C	



2	Overall Rating – Good Sound and well maintained, showing only slight signs of normal wear Delivering full efficiency with little or no performance deterioration Only minor renewal or rehabilitation may be needed in the near term Meets Sewer Condition Category B Could be addressed with preventive measures
1	Overall Rating – Excellent Condition Recently installed asset Fully operable, well maintained, and consistent with current standards Little to no wear shown and no repairs are necessary Does not impact overall performance and meets all expected future requirements Meets Sewer Condition Category A

PHYSICAL CONDITION IMPACT SCORE EXAMPLES:

Projects scoring in the low range (1-2) typically include projects that:

- Are not driven by the condition of existing assets (ex. Sewer line to new development, construction of new facility),
- Result in new construction that add redundancy to the system (ex. additional pumps, redundant sewer line) not driven by the condition of existing assets (condition is not the driver for the project).

Projects scoring in the mid-range (3-4) typically include projects that are driven by the condition of existing assets (condition is a key driver for the project)

Projects scoring in the high range (5) typically are those where physical condition is the primary driver for the project and the probability of failure is very high.



2. PERFORMANCE / PROCESS CONDITION (CRITERIA WEIGHTING - 15 %)

PERFORMANCE / PROCESS CONDITION

Performance /Process condition is the ability of the collective group of assets included in a project to meet **operational requirements** both now and into the future. The condition scores should be based upon **formal asset capacity assessment**, **technical obsolescence**, **asset reliability**, **outdated technical specifications/standards/technology**.

The performance condition is a mechanism to assess the **probability of failure** for a collective group of assets in a project. When applying scores, consider probability of asset failure if the proposed project should the proposed project not be implemented and the existing assets continue to operate as status quo.

For aging infrastructure projects:

- o <u>Plant Projects</u> Evaluation is typically based on results of visual assessment, historical data (capacity issues), technical obsolescence, and/or Preliminary Engineering Report (PER) studies
- <u>Collection Projects</u> Evaluation is typically based on capacity assessments identified in hydraulic models, data collected during wet weather events (potential for overflows), and/or CCTV data

For non-aging infrastructure projects, process condition score could be determined based on internal or external consulting studies demonstrating technical obsolescence, space constraints and capacity issues.

For projects where formal process condition assessment information is available (typically aging infrastructure projects) initial scoring should be based on an average performance condition scores for all assets included in the project. Adjustments can then be made to reflect the aggregated project, and supporting justification should be provided in the prioritization analysis section of the business case.

SCORE	CRITERIA
5	Overall Rating – Very Poor Current performance is <u>unacceptable</u> and does <u>not meet current requirements</u> <u>Significant</u> capacity issues with <u>actual overflows</u> attributed to capacity limitations <u>Recurring and expected</u> continued failures against performance standards Equipment is <u>obsolete</u> and/or <u>extremely difficult to maintain</u> Procurement of spare parts <u>extremely difficult or impossible</u>
4	Overall Rating – Poor Has expected performance failures under normal conditions (i.e. routine operation of overflows, persistent odor complaints, or capacity issues). High risk of performance failure under extreme conditions Current performance is marginal and does not meet future additional requirements or increased demand Equipment may be nearing obsolescence and very difficult to maintain Difficult to procure spare parts



3	Overall Rating – Moderate Generally meets all design needs, but can expect some failures in performance under current normal conditions (i.e. occasional operation of overflows, regulatory compliance failures, odor complaints, or design shortcomings). Moderate risk of performance failure under extreme conditions Current performance is acceptable to marginal but would likely not meet future additional requirements or increased demand. Equipment may become technically obsolete in the near future
2	Overall Rating – Good Meets <u>all</u> design requirements under normal conditions May have <u>minor</u> risk under extreme conditions. Overall good performance and will likely meet expected future requirements. Equipment is relatively up to date and consistent with current technical specifications and standards
1	Overall Rating – Excellent Fully operable, well maintained Consistent with current standards and technology Meets all design and legal/regulatory requirements in all demand conditions - i.e. capacity exceeds maximum designed flow and/or adequate standby or emergency protection provided

PROCESS CONDITION IMPACT SCORE EXAMPLES:

Projects scoring in the low range (1-2) typically include projects that:

- Are not driven by the process condition of existing assets (ex. sewer line to new development, construction of new facility)
- o Are not driven by technical obsolescence and outdated standards/requirements

Projects scoring in the mid-range (3-4) typically include projects that are driven by the process condition of existing assets (adding redundancy to the system to mitigate capacity issues)

Projects scoring in the high range (5) typically are those where process condition is a key driver for the project and the probability of failure is very high.



3. REGULATORY / ENVIRONMENTAL (CRITERIA WEIGHTING - 15 %)

REGULATORY / ENVIRONMENTAL IMPACT (CONSEQUENCE)

Evaluate likely consequence or impacts to regulatory compliance and the environment should the project not be implemented and/or positive impacts when the project is complete. Analyze issues such as: enforceable regulatory mandates, permit and regulatory compliance, discharges, and overall environmental impacts. Consider available historic information on permit violations and regulatory issues, along with the size/scope of the project and assets involved.

Plant Projects - Evaluation is typically based on documented past violations, treatment plant discharge permit regulatory requirements, measurable impacts of regulatory non-compliance

Collection Projects – Evaluation is typically based on documented past overflows/violations, environmental studies, data associated with overflow volume, measurable impacts of regulatory non-compliance

SCORE	CRITERIA	
5	Overall Rating – Major Impact / Catastrophic Consequence Project is part of a mandated or otherwise enforceable program and is directly related to meeting current requirements or known future requirements Measurable positive impact such as mitigated CSO/SSO, compliance with regulatory requirements and permits (air quality, water quality, NPDES) Past permit violations Not implementing the project will result in significant measurable negative environmental impact on a regional or statewide level with lingering or permanent/irreversible impact on the wider ecosystem. Deferring and/or canceling the project would pose an immediate risk of non-compliance, major federal or state/district permit violations, and/or regulatory scrutiny. Accurate data on past risks or failure events is available to support project decision Compliance failure would result in significant fines, enforcement actions, measurable environmental impact, and/or negative public and media attention.	
4	 Overall Rating – Significant Impact / Major Consequence Project is not part of a mandated or otherwise enforceable program, but can be directly related to known/expected future requirements. Expect to see positive impact such as reduction in CSO/SSO, compliance with regulatory requirements and permits (air quality, water quality, NPDES) Not implementing the project creates significant measurable negative environmental impact to a wide geographic area with strong likelihood of an impact to the wider ecosystem. Deferring and/or canceling the project may pose a risk of non-compliance in the near term, potential permit violations, and/or regulatory scrutiny Compliance failure would result in moderate fines, enforcement actions, environmental impact, and/or possible negative public and media attention. 	



Overall Rating - Moderate Impact / Moderate Consequence Project will have a moderate positive impact on regulatory compliance issues such as SSOs/CSOs, NPDES permits, air quality permits, water quality, etc. Not implementing the project creates potential for moderate environmental impact to a local neighborhood/geographic area, with possibility for a wider impact to the ecosystem. Project is not part of a mandated or otherwise enforceable program (such as a consent decree) but is 3 directly or indirectly related to expected future requirements. Deferring and/or canceling the project may indicate a greater risk of non-compliance in the future but not for 1-3 years. Data on past risk or failure events may be available to support decision, but may be less than the desired level of detail. Compliance failure would result in a small fine, enforcement action and/or environmental impact, and there may be negative public and media attention at the local level. Overall Rating - Low Impact / Minor Consequence Project will have a moderate to low impact on specific regulatory compliance issues such as SSOs/CSOs, NPDES permits, air quality permits, water quality, etc. Not implementing the project creates potential for minor environmental impact at a localized site (i.e. small parcel). Project is not part of a mandated or otherwise enforceable program (such as a consent decree) but is 2 directly or indirectly related to expected future requirements. Deferring and/or canceling the project may indicate a greater risk of non-compliance in the future but not for 4-5 years Some data on past risk or failure events is available to support decision, but may be less than the desired level of detail. Compliance failure would likely not result in a significant fine, enforcement action or environmental impact, but may have some local impact on a small area. Overall Rating - Minimal to No Impact / Insignificant Consequence Project will have low or no impact on specific regulatory compliance issues such as SSOs/CSOs. NPDES permits, air quality permits, water quality etc. Not implementing the project creates potential for negligible environmental impact at a much localized level (i.e. individual property). Project is not part of a mandated or otherwise enforceable program (such as a consent decree) and is 1 only related to very long term future requirements. Deferring and/or canceling the project will not result in risk of non-compliance within the next 6-10 <u>yea</u>rs Limited data on past risk or failure events is available to support decision, but may have some individual experience and/or opinions. Compliance failure would likely not result in a significant fine, enforcement action, or environmental impact

REGULATORY / ENVIRONMENTAL IMPACT SCORE EXAMPLES:

Projects scoring in the low range (1-2) could include:

- Areas of the sewer sheds that are consistently meeting SSO/CSO requirements and have not experienced historic compliance issues.
- Is not required as part of an enforceable or mandated program
- o Limited direct relation to permits or regulations

Projects scoring in the high range (4-5) would include:

- o Facilities or assets that have numerous historic violations and where likelihood of causing beach/waterway closures, significant spills, or other environmental damage is high
- Is part of an enforceable program



OPERATIONS & MAINTENANCE (O&M) / SERVICE LEVEL / RELIABILITY (CRITERIA WEIGHTING – 12 %)

SERVICE LEVEL / RELIABILITY IMPACT (CONSEQUENCE)

Evaluate likely impacts to overall **O&M** including negative impacts should the project not be implemented and/or positive impacts when the project is complete. Analyze such issues as: maintenance requirements (labor & materials), breakdowns, levels of reactive maintenance, and downtime due to equipment obsolescence.

Evaluate likely impacts to <u>service levels and reliability</u> should the project not be implemented (negative impacts) and/or positive impacts when the project is complete. Analyze issues such as: backups, blockages/collapses, air quality, odor complaints, breaks, and service interruptions. Redundancy can also be factored in along with historic information on past reliability in comparison to the overall system. Evaluation is typically based on factors that mitigate service interruptions (asset redundancy – additional pumps, redundant sewer line)

SCORE	CRITERIA
5	Overall Rating – Major Impact / Catastrophic Consequence O&M Project will have a major and measurable positive impact on O&M including reduction in required preventive and/or reactive maintenance and inspections. Project will completely alleviate ongoing O&M issues such as frequent breakdowns, downtime due to obsolete equipment, history of repeat failures, costly maintenance, etc. Measurable cost reductions (including labor and materials) are expected to be 25% or greater per year than the current budget for that specific function or area. Measurable reduction (75% or more) in reactive maintenance activities Service Level/Reliability Implementing the project will have a major and measurable positive impact on service levels and/or system reliability and is related to specific goals. Not implementing the project creates potential for significant, persistent, ongoing, and continuous service interruption and/or reliability issues (flooding incidents, spills, backups, reduced equipment runtimes, blockages and collapses, air quality, odor complaints, service interruptions etc.). High likelihood of serious inconveniencies, and /or business impacts, for customers affected. Project would be expected to impact a very large number of customers (10%-20%+ of customers within a specified area) and/or a specific critical customer (hospitals, schools, manufacturing facilities, etc.). No redundancy in the area to mitigate impacts.
4	Overall Rating − Significant Impact / Major Consequence O&M ○ Project will have a significant positive impact on O&M including reduction in required preventive and corrective maintenance and inspections. ○ Project will alleviate most ongoing O&M issues such as frequent breakdowns, downtime due to obsolete equipment, history of repeat failures, costly maintenance, etc. ○ Measurable cost reductions (including labor and materials) are expected to be 10% to 24% per year of the current budget for that specific function or area. ○ Measurable reduction (50% - 74%) in reactive maintenance activities



Service Level/Reliability

- Implementing the project will have a <u>significant</u> positive impact on service levels and/or system reliability.
- Not implementing the project creates potential for <u>frequent and repetitive</u> service interruption and/or reliability issues (flooding incidents, spills, backups, reduced equipment runtimes, blockages and collapses, air quality, odor complaints, service interruptions etc.).
- o Likelihood of serious inconveniencies and business impacts for affected customers
- o Improvements would be expected to impact a large number of customers (4%-9% of customers within a specified area) and/or critical customers (hospitals, schools, manufacturing facilities, etc.). Limited redundancy in the area to mitigate impacts.

Overall Rating - Moderate Impact / Moderate Consequence O&M

- Project will have a <u>moderate</u> positive impact on O&M including reduction in required preventive and corrective maintenance and inspections.
- Project is likely to <u>alleviate some ongoing</u> O&M issues such as frequent breakdowns, downtime due to obsolete equipment, history of repeat failures, costly maintenance, etc.
- Measurable cost reductions (including labor and materials) are expected to be <u>5% to 9%</u> per year
 of the current budget for that specific function or area.
- Reduction (25% to 49%) in reactive maintenance activities

3 Service Level/Reliability

- Implementing the project will have a <u>moderate</u> positive impact on service levels and/or system reliability or decreased overall risk.
- Not implementing the project creates potential for <u>multiple</u> (several times per year) service interruption and/or reliability issues (flooding incidents, spills, backups, reduced equipment runtimes, blockages and collapses, air quality, odor complaints, service interruptions etc.).
- o Some likelihood for <u>noticeable inconveniencies</u>, and/or business impacts for impacted customers.
- Improvements would be expected to impact a <u>medium</u> number of customers (<u>2% to 3%</u> of customers within a specified area), but no significant impact on critical customers (hospitals, schools, manufacturing facilities, etc.).
- Moderate redundancy in the area to limit impacts.

Overall Rating – Low Impact / Minor Consequence $\underline{O\&M}$

- Project will have a <u>moderate to low</u> positive impact on O&M including reduction in required preventive and corrective maintenance and inspections, but assets involved are not specifically critical.
- Project may alleviate <u>very few ongoing</u> O&M issues such as frequent breakdowns, obsolete equipment, history of repeat failures, costly maintenance, etc.
- Measurable cost reductions (including labor and materials) are expected to be <u>2% to 4%</u> per year
 of the current budget for that specific function or area.
- o Reduction (less than 25%) in reactive maintenance activities



2

Service Level/Reliability

- Project will have a moderate to <u>low</u> positive impact on service levels and/or system reliability or decreased overall risk.
- Not implementing the project creates potential for <u>occasional</u> service interruption and/or reliability issues (flooding incidents, spills, backups, reduced equipment runtimes, blockages and collapses, air quality, odor complaints, service interruptions etc.).
- Small likelihood for inconveniencies and/or business impacts for impacted customers
- Improvements would be expected to impact a smaller number of customers (<u>1% of customers</u> within a specified area) in the medium to long term.
- Low redundancy in the area to limit impacts.

Overall Rating – Minimal to No Impact / Insignificant Consequence O&M

- Project will have a <u>limited</u>, <u>low</u>, <u>or negative</u> impact on O&M including reduction in required preventive and corrective maintenance and inspections, and assets involved are not critical.
- Project is not expected to significantly impact any O&M issues.
- Measurable cost reductions (including labor and materials) are expected to be in <u>1% to negligible</u>, or could increase overall O&M costs.
- Negligible or no reduction (1% 5%) in reactive maintenance activities

Service Level/Reliability

1

- Project will have low to <u>no</u> measurable positive impact on service levels and/or system reliability or decreased overall risk
- Not implementing the project creates potential for <u>limited/no</u> service interruption and/or reliability issues (flooding incidents, spills, backups, reduced equipment runtimes, blockages and collapses, air quality, odor complaints, service interruptions etc.).
- <u>Limited to no</u> likelihood inconveniencies, business impacts, and/or health and safety issues for customers affected.
- Improvements may be expected to have limited/no impact on customers
- Have redundancy in the area to limit impacts.

O&M / SERVICE LEVEL / RELIABILITY IMPACT SCORE EXAMPLES:

From an O&M stand-point, projects that involve creation of new assets would be expected to score in the low range (1-2) in this criteria. In some cases, these can also increase O&M cost and workloads. From a Service Level/Reliability stand-point, Projects scoring in the low range (1-2) would include treatment plant and collection system facilities and assets with redundancy and capacity.

Most rehabilitation and renewal projects (plant and collection), would typically receive a score in the high range (4-5) as they are likely to reduce the cost and effort involved in historic breakdown and reactive maintenance work orders. From a service level/reliability stand-point, projects scoring in the high range (4-5) would include large diameter force mains or interceptors / tunnels that have limited redundancy and a failure would impact very large numbers of customers.

Collection capacity projects with existing overflow issues would also be given high scores, as would complex or unique assets with high cost and time for restoration (plant process assets).



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5. SAFETY (CRITERIA WEIGHTING - 16%)

Evaluate likely impacts to potential safety/hazard to public and staff, regulatory (ex. OSHA) and non-regulatory requirements associated with health and safety, and overall health and safe working conditions.

requirements associated with health and safety, and overall health and safe working conditions.	
SCORE	CRITERIA
5	 Overall Rating – Major Impact / Catastrophic Consequence Project will have a major & measurable positive impact on staff or public health & safety including working conditions, use and exposure to hazardous materials, and exposure to potential accidents. Likely to address major hazard issues or concerns. Not implementing the project may continue to pose significant employee or public safety/hazard issues with increased potential for serious injury and major regulatory (i.e. OSHA) violations.
4	 Overall Rating – Significant Impact / Major Consequence Project will have a significant positive impact on staff or public health and safety including working condition, use and exposure to hazardous materials, and exposure to potential accidents. Likely to address significant hazard issues or concerns. Not implementing the project may continue to pose significant employee or public safety/hazard issues with some potential for significant injury and significant regulatory violations (i.e. OSHA).
3	 Overall Rating – Moderate Impact / Moderate Consequence Project will have a moderate positive impact on staff or public health and safety including working condition, use and exposure to hazardous materials, and exposure to potential accidents. Likely to address minor hazard issues or concerns. Not implementing the project would only pose limited to moderate employee or public safety/hazard issues with some potential for minor injury & minor regulatory violations (i.e. OSHA)
2	Overall Rating – Low Impact / Minor Consequence O Project will have a limited positive impact on staff or public health and safety including working condition, use and exposure to hazardous materials, or exposure to potential accidents. There are no major staff or hazard issues or concerns to be addressed by the project. Not implementing the project is unlikely to impact employee or public safety/hazard.
1	Overall Rating – Minimal to No Impact / Insignificant Consequence o Project will have no positive impact on staff or public health and safety including working condition, hazardous material, or exposure to potential accidents. o There are no major staff or hazard issues or concerns to be addressed by the project. Employee / public safety/hazard issues not a concern.

SAFETY IMPACT SCORE EXAMPLES

Projects that involve creation of new assets would be expected to score in the low range (1-2) in this criteria including many growth and regulatory projects. Replacement and upgrades to assets and facilities such as chemical systems tend to reduce safety/hazard potential, which could receive higher scores (4-5 range).



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6. PUBLIC BENEFIT/PERCEPTION AND COMMUNITY/ GROWTH (CRITERIA WEIGHTING – 7 %)

PUBLIC BENEFIT/PERCEPTION IMPACT (CONSEQUENCE)

Evaluate likely <u>benefits to the public</u> when the project is complete and/or the negative impacts should the project not be implemented. Analyze public benefit/perception issues such as:

- Overall public and community perception and expectations,
- · Reputation,
- Stakeholder relationships
- Media coverage

Evaluate likely impacts to **growth and the community** when the project is complete and/or negative impacts should the project not be implemented. Analyze such issues as:

- Overall support for City and neighborhood growth and economic development,
- Strategic redevelopment & growth areas,
- · Politically driven projects,
- Interagency coordination,
- · Quality of life for residents,
- Aesthetics

SCORE	CRITERIA
5	Overall Rating − Major Impact / Catastrophic Consequence Public Benefit/Perception Project has a major positive impact on the public and LA SAN's overall public image and is seen as a significant positive achievement for the Department, City and/or associated neighborhoods. Initiates extensive positive national media coverage. Results in improved community and stakeholder relationships, goodwill, and confidence in utility with accolades for management and staff. Not implementing the project is highly likely to cause catastrophic negative public impact including initiation of major government and/or regulatory investigation that is likely to lead to extensive widespread negative media coverage, rulings, or damage to community confidence with the utility and management. Community/Growth Project will have a major and measurable positive impact by supporting City, regional and/or neighborhood growth including strategic growth areas and coordination and/or shared outcomes with other agencies or departments. This includes a measurable impact on the public and community through economic development This is a politically driven project Project has a major impact quality of life and aesthetics Project skey part of a strategic growth area for the City/Community. Project will result in significant additional revenues for the utility (§1M+ per year) with minimal risk (i.e. future revenues and utilization are guaranteed). Consider added benefit if the project will greatly improve utilization of existing infrastructure, even if new assets and capacity are required.



Overall Rating - Significant Impact / Major Consequence

Public Benefit/Perception

- Project has a <u>significant and noticeable</u> impact on the public and Department's overall public image and is seen as a positive achievement for the Department, City, and/or associated neighborhoods.
- Initiates positive <u>local</u> media coverage.
- Results in improved community and stakeholder relationships, goodwill, and confidence in utility with positive implications for management and staff.
- Not implementing the project has a chance to have a <u>major negative</u> public impact including initiation of government and/or regulatory investigation that may lead to local negative media coverage, rulings, or damage to community confidence with the utility and management.

4

Community/Growth

- Project will have a significant positive impact by supporting City, regional and/or neighborhood growth, strategic growth areas and coordination and/or shared outcomes with other agencies or departments.
- This includes a <u>measurable</u> impact on the public and community through economic development and is also likely to impact quality of life and aesthetics.
- Project will impact a strategic growth area for the City/Community.
- Project will result in <u>significant</u> additional revenues for the utility (\$500,000 -\$999,000 per year) with moderate risk (i.e. future revenues and utilization are 75% likely).
- Consider any added benefit if the project will <u>better utilize both existing and new infrastructure</u>.

Overall Rating - Moderate Impact / Moderate Consequence

Public Benefit/Perception

- Project has a <u>moderate</u> impact on the public and Department's overall public image and is seen as an achievement for LA SAN, City and/or associated neighborhoods.
- May not receive media coverage, but may have a positive influence on community and stakeholder relationships and confidence in the utility.
- Not implementing the project has a <u>moderate chance of moderate</u> negative public impact including attracting negative government and/or regulatory interest with some potential for media coverage, rulings, or damage to community confidence with the utility and management.

3

Community/Growth

- Project will have a <u>moderate</u> positive impact by supporting City, regional and/or neighborhood growth, strategic growth areas and coordination and/or shared outcomes with other agencies or departments.
- o This includes a measurable impact on the public and community through economic development and is somewhat likely to impact quality of life and aesthetics.
- o Project will have some impact on a strategic growth area for the City/Community.
- Project will result in moderate additional revenues for the utility (\$50,000-\$499,000 per year) with moderate risk (i.e. future revenues and utilization are 50-75% likely).
- Consider if project mostly requires new infrastructure.



Overall Rating - Low Impact / Minor Consequence Public Benefit/Perception Project has a low impact on the public and Department's overall public image with minor recognition for Department, City and/or associated neighborhoods. No media coverage, but some minor impact on community and stakeholder relationships and confidence in the utility. Not implementing the project has a minor chance of public impact and would not attract negative government and/or regulatory interest but may have minor potential for media coverage. 2 Project will have a low to moderate impact by supporting City, regional and/or neighborhood growth including strategic growth areas and coordination and/or shared outcomes with other agencies or departments. This includes a <u>measurable</u> impact on the public and community through economic development and may have minor & indirect impact quality of life and aesthetics. Project may or may not have some impact on a strategic growth area for the City/Community. Project will result in additional revenues for the utility (less than \$50,000 per year) with significant levels of risk (i.e. future revenues and utilization are 40-50% likely). Consider if project mostly requires new infrastructure. Overall Rating - Minimal to No Impact / Insignificant Consequence Public Benefit/Perception Project has minimal to no impact on the public and Department's overall public image with no impact on community and stakeholder relationships and confidence in the utility. Community/Growth

1

- Project will have low to no measurable impact on City, regional and/or neighborhood growth with little to no measurable impact on the public and community through economic development and is not expected to impact quality of life and aesthetics.
- o Project will not impact a strategic growth area for the City/Community.
- Project may result in <u>minimal additional revenues</u> for the utility (less than \$50,000 per year) but with a <u>high</u> level of risk (i.e. future revenues and utilization are highly suspect).
- Consider if project requires <u>all new</u> infrastructure as existing capacity is not available.

PUBLIC BENEFIT/PERCEPTION & COMMUNITY/GROWTH IMPACT SCORE EXAMPLES:

Most projects would be expected to score in the low range (1-2) in this criteria as the number of capital improvements projects specifically aimed at community growth and development is typically and most projects small tend to be internally focused with limited visibility to the public.

Projects scoring in the high range (4-5) would include high profile projects that are widely talked about in the public such a new treatment/pumping facility, major regulatory compliance efforts, projects where critical assets are involved such as bridges and highways or mass transit. Projects that attract stakeholder interest such as environmental and community groups would also receive higher scores. Projects scoring in the high range would also include politically driven projects, neighborhood expansions and improvements that support the community and would bring additional revenues and are directly linked to strategic redevelopment areas and have added benefit shared outcomes with other agencies or departments.

Projects expected to receive a moderate score (2-3) could include building and facility upgrades that enhance community aesthetics, or smaller targeted projects aligned with City/Community growth and development efforts, projects with large financial or regulatory implications, that may only receive public attention if there was a significant project issue or major event / failure.



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7. FINANCIAL (CRITERIA WEIGHTING - 11 %)

FINANCIAL IMPACT (CONSEQUENCE)

Evaluate likely financial impacts when the project is complete and/or negative financial impacts should the project not be implemented. Consider factors such as: opportunity cost (ex. resources, O&M, minor capital), potential increase in revenue, avoidance of fines, avoidance of emergency repairs, grants and funding, financial assessment where available (NPV, ROI, Breakeven period) etc.

SCORE	CRITERIA	
5	 Overall Rating – Major Impact / Catastrophic Consequence Major impact to the utility from the perspective of likely increase in revenue, avoidance of fines, avoidance of emergency repairs or damage, securing of grants or other external funding. Would result in major expected positive financial implications >\$5,000,000. Not implementing the project would have major/extensive financial consequences from revenue loss, repair / restoration cost, downtime, fines, damage, etc. Would result in major budget implications requiring deferral or cutbacks in other areas. Total financial consequence >\$5,000,000 	
4	 Overall Rating – Significant Impact / Major consequence Significant impact to the utility from the perspective of likely increase in revenue, avoidance of fines, avoidance of emergency repairs or damage, securing of grants or other external funding. Would result in significant expected positive financial implications of \$1,000,000 - \$5,000,000. Not implementing the project would have significant financial consequences from revenue loss, repair / restoration cost, downtime, fines, damage, etc. Likely to have some budget implications requiring deferral or cutbacks in other areas. Total financial consequence of \$1,000,000 - \$5,000,000 	
3	Overall Rating – Moderate Impact / Moderate Consequence Moderate impact to the utility from the perspective of likely increase in revenue, avoidance of fines, avoidance of emergency repairs or damage, securing of grants or other external funding. Would result in moderate expected positive financial implications of \$250,000 - \$999,999. Not implementing the project would have moderate financial consequences from revenue loss, repair / restoration cost, downtime, fines, damage, etc. Unlikely to have wider budget implications. Total financial consequence of \$250,000 - \$999,999	
2	 Overall Rating – Low Impact / Minor Consequence Low impact to the utility from the perspective of likely increase in revenue, avoidance of fines, avoidance of emergency repairs or damage, securing of grants or other external funding. Would result in low expected positive financial implications of \$100,000 - \$249,999. Project would have a low positive impact on resource capacity. Not implementing the project would have limited/low financial consequences from revenue loss, repair / restoration cost, downtime, fines, damage, etc. Total financial consequence of \$100,000 - \$249,999 	



Overall Rating – Minimal to No Impact / Insignificant Consequence Minimal to no impact to the utility from the perspective of likely increase in revenue, avoidance of fines, avoidance of emergency repairs or damage, securing of grants or other external funding. Would result in minimal to no expected positive financial implications of <\$100,000. Not implementing the project would have insignificant financial consequences from revenue loss, repair / restoration cost, downtime, fines, damage, etc. Total financial consequence of <\$100,000.



8. EFFICIENCY / ENERGY AND PROCESS EFFECTIVENESS / INSTITUTIONAL KNOWLEDGE IMPACT (CRITERIA WEIGHTING – 8 %)

EFFICIENCY / ENERGY IMPACT (CONSEQUENCE)

Evaluate likely impacts to <u>efficiencies in energy</u> use (electricity/gas), and emissions should the project not be implemented and/or positive impacts when the project is complete. Analyze issues such as: water and energy (electricity/gas) conservation and positive "green" project components such as recycling/reuse, fuel consumption, and emissions reductions. Can factor in alignment with City of Los Angeles sustainability initiatives. Consider alignment with LEED/Envision Sustainability certification requirements.

Evaluate likely impacts to overall <u>business process optimization and institutional knowledge & skills to staff</u> when the project is complete and/or negative impacts should the project not be implemented. Analyze issues such as: optimization process efficiency, automation, employee and institutional knowledge, reporting and analysis capabilities, etc. Evaluation is typically based on the use similar assets within an asset class (pumps, SCADA platforms) enabling resource optimization (relevant staff will be trained in the O&M of pumps from the same manufacturer).

SCORE	CRITERIA	
5	Overall Rating – Major Impact Efficiency/Energy Project will have a major and measurable positive impact on energy use, conservation, and/or environmental responsibility and sustainability. This could include reduction in electricity/gas consumption (ex. kWh) or a reduction of greenhouse gas emissions of 20% or more (replace vs. rehabilitate carbon footprint), and also have a net financial benefit to the utility. Project could also have major impacts on water reuse, effluent reuse/recycling or other sustainability initiatives. Direct alignment with City of Los Angeles sustainability initiatives Process Effectiveness/Institutional Knowledge Project will have a major and measurable impact on business process optimization and institutional knowledge resulting in the reduction in labor cost and/or time, improvements to efficiency such as cycle time and response, and automation of routine activities (i.e. analysis and data entry) Project will result in major improvements in knowledge capture in support of standardization, optimization, and succession planning Project will result in major and measurable time and cost savings	
4	Overall Rating – Significant Impact / Major Consequence Efficiency/Energy Project will have a significant positive impact on energy use, conservation, and/or environmental responsibility and sustainability. This could include reduction in electricity/gas/power consumption (ex. kWh) or a reduction of greenhouse gas emissions of 10-20% (replace vs. rehabilitate carbon footprint Project could have significant impacts on water reuse, effluent reuse/recycling or other sustainability initiatives. Some alignment with City of Los Angeles sustainability initiatives	



	Process Effectiveness/Institutional Knowledge ○ Project will have a significant positive impact on business process optimization and institutional knowledge resulting in the reduction in labor cost and/or time, improvements to efficiency such as cycle time and response, and automation of routine activities (i.e. analysis and data entry) ○ Project will result in significant improvements in knowledge capture in support of standardization, optimization, and succession planning Project will result in significant time and/or cost savings
3	Overall Rating – Moderate Impact / Moderate Consequence Efficiency/Energy Project will have a moderate positive impact on energy use, conservation, and/or environmental responsibility and sustainability. This could include reduction in electricity/gas consumption (ex. kWh) or a reduction of greenhouse gas emissions of 5-10% (replace vs. rehabilitate carbon footprint). Project could have moderate impacts on water reuse, effluent reuse/recycling or other sustainability initiatives. Process Effectiveness/Institutional Knowledge Project will have a moderate positive impact on business process optimization and institutional knowledge resulting in the reduction in labor cost and/or time, improvements to efficiency such as cycle time and response, and automation of routine activities (i.e. analysis and data entry) Project will result in moderate improvements in knowledge capture in support of standardization, optimization, and succession planning Project will result in moderate time and/or cost savings
2	Overall Rating – Low Impact / Minor Consequence Efficiency/Energy Project will have a low to moderate positive impact on energy use, conservation, and/or environmental responsibility and sustainability. This could include reduction in electricity/gas consumption (ex. kWh) or a reduction of greenhouse gas emissions of 1-5% (replace vs. rehabilitate carbon footprint). Project could have a low impact on water reuse, effluent reuse/recycling or other sustainability initiatives Process Effectiveness/Institutional Knowledge Project will have a low positive impact on business process optimization and institutional knowledge resulting in the reduction in labor cost and/or time, improvements to efficiency such as cycle time and response, and automation of routine activities (i.e. analysis and data entry) Project will result in low improvements in knowledge capture in support of standardization, optimization, and succession planning Project will result in low or limited time and/or cost savings



Overall Rating – Minimal to Negative Impact / Insignificant Consequence Efficiency/Energy

- Project will have a <u>minimal to negative</u> impact on energy use, conservation, and/or environmental responsibility and sustainability.
- At most, the project could include <u>slight</u> reduction in electricity/gas consumption (ex. kWh) or a reduction of greenhouse gas emissions of less than 1% (replace vs. rehabilitate carbon footprint).
- Project will also have <u>limited to no</u> impacts on water reuse, effluent reuse/recycling or other sustainability initiatives.

Process Effectiveness/Institutional Knowledge

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- Project will have a limited, low or negative impact on business process optimization and institutional knowledge resulting in the reduction in labor cost and/or time, improvements to efficiency such as cycle time and response, and automation of routine activities (i.e. analysis and data entry)
- Project will result in <u>negligible or negative</u> impact on knowledge capture in support of standardization, optimization, and succession planning
- o Project will result in no time and cost savings

EFFICIENCY / ENERGY & PROCESS EFFECTIVENESS/INSTITUTIONAL KNOWLEDGE IMPACT SCORE EXAMPLES:

Most projects would be expected to score in the low range (1-2) in this criterion as the number of projects specifically aimed at efficiency/energy and optimization effectiveness are small.

Projects scoring in the high range (4-5) would include efficiency and energy driven projects such as digester gas capture, bio-solids recycling, LEED certified buildings or Envision (collection projects) certifiable projects, alternative fuel or efficient vehicle purchases, and water reuse projects. Projects that directly impact overall process efficiency and cost reduction such as business process improvements, information technology investments will also score high.

Projects that would receive a moderate score (2-3) could include motor or pump replacements or installation of VFDs where new technology is significantly more energy efficient than older technology being replaced.



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