DRAFT NEEDS MAP UPDATE

06/19/2019

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INTRODUCTION TO NEEDS

Need is determined by assessing the relationship of certain assets to the LA River, and the method of assessment varies based on the type of dataset being used.

SCORE

Higher Score ▲ = ▲ Higher Need

Lower Score ▼ = ▲ Higher Need

DENSITY

Higher Density ▲ = ▲ Higher Need

Lower Density ▼ = ▲ Higher Need

PROXIMITY

Greater Proximity ▲ = ▲ Higher Need

Lesser Proximity ▼ = ▲ Higher Need

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GOAL-BASED NEEDS CRITERIA

1. FLOOD RISK REDUCTION
- LA River Level of Channel Protection
- Floodplains
- Sea Level Rise
- Critical Infrastructure & Facility Density

2. PARKS
- Parks Needs Assessment
- CalEnviroScreen

3. ECOSYSTEMS
- Habitat Areas
- Habitat Areas Buffer
- Linkages and Confluences
- Unprotected Areas

4. ACCESS
- River Trail Access Points
- River Trail Gaps
- Adjacent Trail Gaps
- Health Composite
- Metro Stops, Parks, & Schools

5. ARTS & CULTURE
- Arts & Culture Asset Density
- Population Density
- Household Income

6. HOUSING AFFORDABILITY
- Displacement Index

7. ENGAGEMENT & EDUCATION
- Engagement Education Asset Density
- Population Density

8. WATER SUPPLY
- Habitat & Recreation Beneficial Uses
- Percent Groundwater Supply
- Groundwater Basins

9. WATER QUALITY
- EWMP/WMP Score
- Water Quality Priority

Higher Score = Higher Need
Lower Score = Higher Need

Higher Density = Higher Need
Lower Density = Higher Need

Greater Proximity = Higher Need
Lesser Proximity = Higher Need

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FLOOD RISK MANAGEMENT

LA River Level of Channel Protection[1] (40%)

River channel with protection below the 1% annual chance of exceedance have a higher need for flood risk reduction.

Floodplains[2] (40%)

Where the river channel has a 1% or greater annual chance of exceedance, there is a higher need for flood risk reduction.

Sea Level Rise[3] (10%)

Areas subject to sea level rise, including approximately the lower 3 miles of the channel, have a higher need for flood risk reduction.

Critical Infrastructure and Facilities Density[4] (10%)

Floodplain areas with higher density of critical infrastructure and facilities have a higher need for flood risk reduction.

LA County Need Analysis:

High Need

Low Need

5 mi.

N

Footnotes:

1. U.S. Army Corps of Engineers (USACE) Los Angeles District. 1996a, 1996b, 1997a, 1997b, and 1999. Los Angeles County Drainage Area Improvement Projects. Design Analysis Report and Design Memoranda; USACE Los Angeles District. 1991. Los Angeles County Drainage Area (LACDA): Review, Part I Hydrology Technical Report: Base Conditions; USACE: Los Angeles District. 2015. Los Angeles River Ecosystem Restoration Integrated Feasibility Report, Final Feasibility Report and Environmental Impact Statement/Environmental Impact Report, Appendix E. Table 17: Original Design Discharge and Existing Channel Capacity; USACE. 1953. Design Memorandum No. 1 Hydrology for Los Angeles River Channel, Owensmouth Avenue to Sepulveda Flood Control Basin; Geosyntec analysis using HEC-RAS models (USACE Los Angeles District. 2005. Los Angeles County Drainage Area Upper Los Angeles River and Tujunga Wash HEC-RAS Hydraulic Models).
2. USACE Floodplain Management Services Special Study Los Angeles River Floodplain Analysis, October 2016; Los Angeles County GIS Data Portal, Flood Zones.
3. Sea Level Rise Tool, 1.41 meters Sea Level Rise Scenario, 2018. http://keystone.gisc.berkeley.edu/cec_gas_study_layers/South_coast
4. Los Angeles County GIS Data Portal, Points of Interest, 2016 & Los Angeles County GIS Data Portal, Disaster Routes, 1998 & California Department of Transportation, California Rail Network, 2013 & EPA, FRS Geospatial Data, 2018 & State of California Energy Commission, California Electric Transmission Line, 2018 & California Department of Conservation, All Wells, 2018.

Source: Geosyntec, OLIN

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LA County Need Analysis:

High Need

Low Need

Footnotes:

1. U.S. Army Corps of Engineers (USACE) Los Angeles District. 1996a, 1996b, 1997a, 1997b, and 1999. Los Angeles County Drainage Area Improvement Projects. Design Analysis Report and Design Memoranda; USACE Los Angeles District. 1991. Los Angeles County Drainage Area (LACDA): Review, Part I Hydrology Technical Report: Base Conditions; USACE: Los Angeles District. 2015. Los Angeles River Ecosystem Restoration Integrated Feasibility Report, Final Feasibility Report and Environmental Impact Statement/Environmental Impact Report, Appendix E. Table 17: Original Design Discharge and Existing Channel Capacity; USACE. 1953. Design Memorandum No. 1 Hydrology for Los Angeles River Channel, Owensmouth Avenue to Sepulveda Flood Control Basin; Geosyntec analysis using HEC-RAS models (USACE Los Angeles District. 2005. Los Angeles County Drainage Area Upper Los Angeles River and Tujunga Wash HEC-RAS Hydraulic Models).
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Source: Geosyntec, OLIN

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FLOOD RISK MANAGEMENT

Need Analysis:

High Need

Low Need

Flood Risk Management Need		LA River Level of Channel Protection[1]	40%		Floodplains[2]	40%		Sea Level Rise[3]	10%		Critical Infrastructure and Facility Density[4]	10%
	=			+			+			+		
Criteria Type:		LARMP Composite Metric			Existing Data			Existing Data			LARMP Composite Metric	
Description:		Where the river channel has a 1% or greater annual chance of exceedance, there is a higher need for flood risk reduction.			Areas within the 1% floodplain have a higher need for flood risk reduction. Areas within the 0.2% annual chance of exceedance floodplain may also have a need for flood risk reduction.			Areas subject to sea level rise, including approximately the lower 3 miles of the channel, have a higher need for flood risk reduction.			Floodplain areas with higher density of critical infrastructure and facilities have a higher need for flood risk reduction.	
Assessment:		High Need = 10% or worse protection Low Need = worse than 1% protection No Need = 1% or better protection, or non-channelized areas			High Need = 1% floodplain Low Need = 0.2% floodplain No Need = area not in a floodplain			High Need = maximum inundation Low Need = minimum inundation No Need = not within 1.41 m of sea level rise			High Need = high density Low Need = low density No Need =area not in a floodplain	

Footnotes:

1. U.S. Army Corps of Engineers (USACE) Los Angeles District. 1996a, 1996b, 1997a, 1997b, and 1999. Los Angeles County Drainage Area Improvement Projects. Design Analysis Report and Design Memoranda; USACE Los Angeles District. 1991. Los Angeles County Drainage Area (LACDA): Review, Part I Hydrology Technical Report: Base Conditions; USACE: Los Angeles District. 2015. Los Angeles River Ecosystem Restoration Integrated Feasibility Report, Final Feasibility Report and Environmental Impact Statement/Environmental Impact Report, Appendix E. Table 17: Original Design Discharge and Existing Channel Capacity; USACE. 1953. Design Memorandum No. 1 Hydrology for Los Angeles River Channel, Owensmouth Avenue to Sepulveda Flood Control Basin; Geosyntec analysis using HEC-RAS models (USACE Los Angeles District. 2005. Los Angeles County Drainage Area Upper Los Angeles River and Tujunga Wash HEC-RAS Hydraulic Models).
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Source: Geosyntec, OLIN

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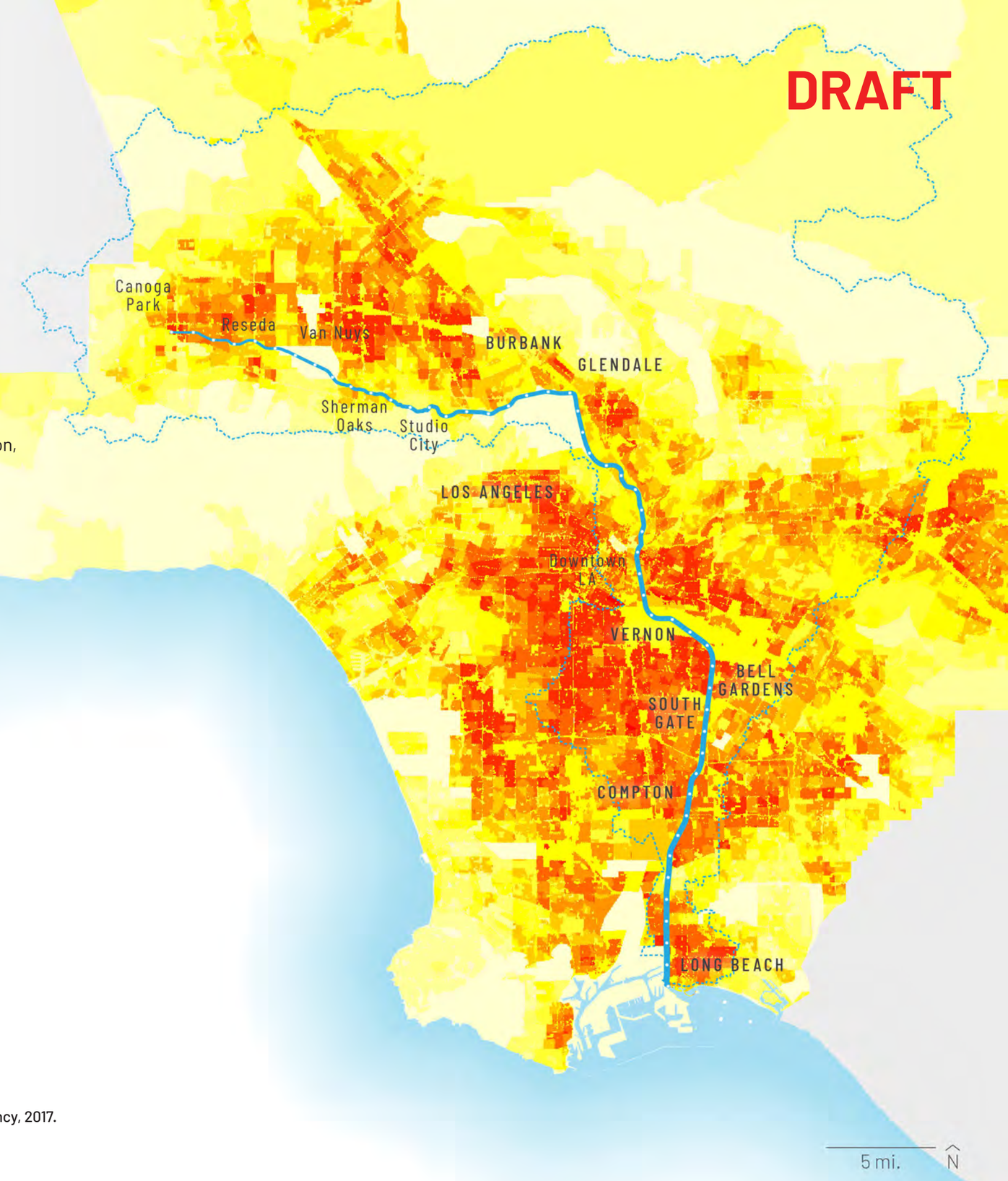
PARKS

Parks Needs Assessment[1] (50%)

Park Need was evaluated by examining park acre need, distance to park, and population density within each study area. A higher park need assessment resulted in a higher park need.

CalEnviroScreen[2] (50%)

CalEnviroScreen is a science-based dataset identifying California communities affected by pollution, and vulnerable to pollution's effects. A higher percentage score resulted in a higher park need.



LA County Need Analysis:

High Need

Low Need

Footnotes:
1. Los Angeles Countywide Comprehensive Parks and Recreation Needs Assessment, 2016.
2. CalEnviroScreen 3.0, Office of Environmental Health Hazard Assessment, California Environmental Protection Agency, 2017.

Source: OLIN

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Source: OLIN

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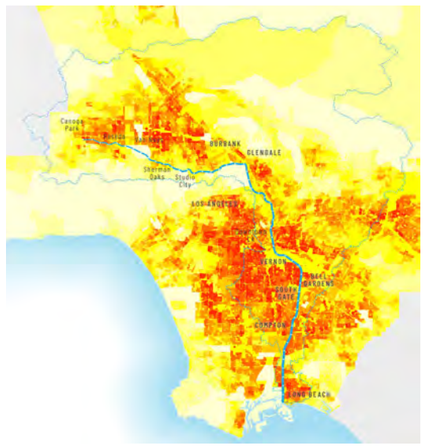
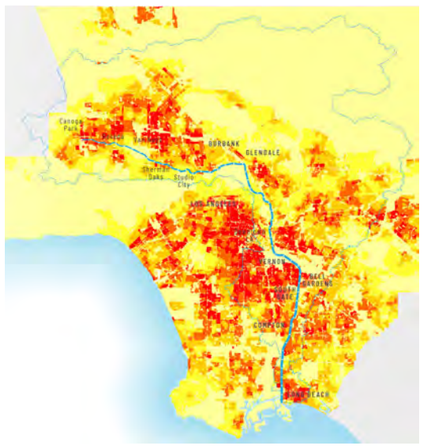
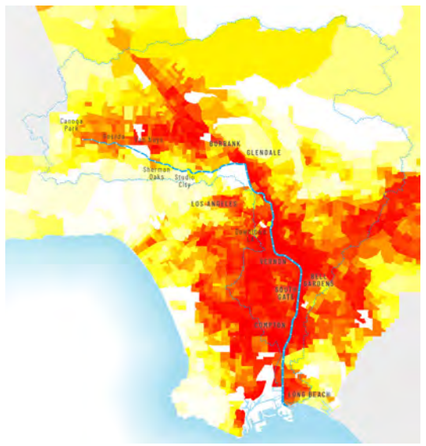
PARKS

Need Analysis:

High Need

Low Need

Parks Need		Countywide Park Need Assessment[1]	50%	CalEnviroScreen[2]	50%
	=		+		
Criteria Type:		LA County Composite Dataset		State of California Composite Dataset	
Description:		Park Need was evaluated by examining park acre need, distance to park, and population density within each study area.		CalEnviroScreen is a science-based dataset identifying California communities affected by pollution, and vulnerable to pollution's effects.	
Assessment:		High Need = very high score Low Need = very low score No Need = no value (not participating)		"High Need = 100% score Low Need = 0% score No Need = no value	

Footnotes:
1. Los Angeles Countywide Comprehensive Parks and Recreation Needs Assessment, 2016.
2. CalEnviroScreen 3.0, Office of Environmental Health Hazard Assessment, California Environmental Protection Agency, 2017.

Source: OLIN

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ECOSYSTEMS

Habitat Areas[1] (50%)

CALVEG Regional Dominance types were used to classify existing areas as predominantly urban/ barren (lowest need), invasive vegetation (medium need), or native/natural habitat areas (high need).

Habitat Areas Buffer[2] (20%)

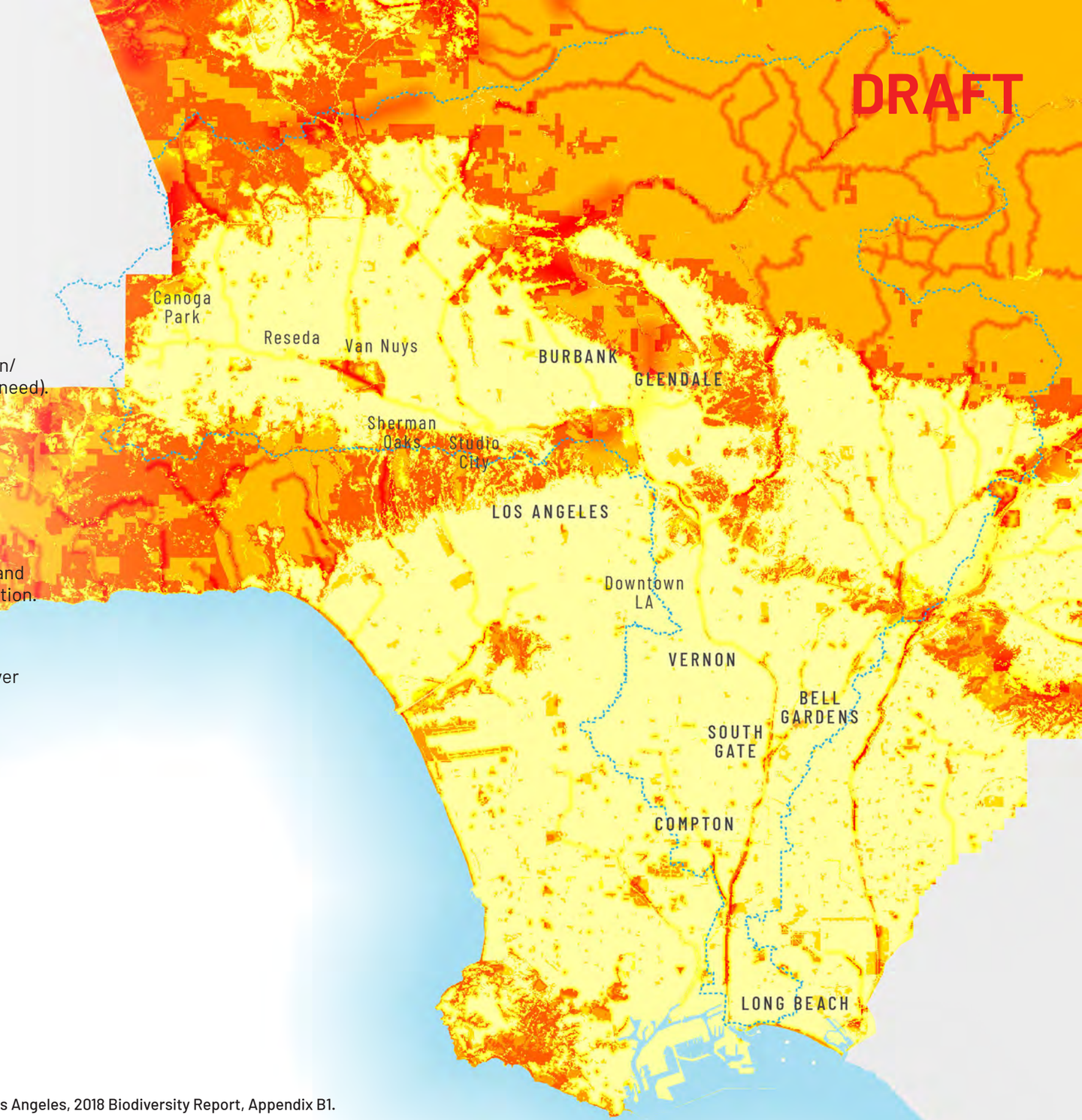
Areas closest to existing protected habitat areas that could help further buffer core protected habitat areas received a higher need designation.

Linkages and Confluences[3] (15%)

Missing linkages are areas without connectivity, but based on location are critical. Tributaries and confluences can also provide connectivity. Areas near linkages received a higher need designation.

Unprotected Areas[4] (15%)

Unprotected areas are vulnerable to development and are less likely to sustain habitat areas over time. Ecosystems that are in areas that are unprotected have high need.



LA River Need Analysis:

High Need

Low Need

Footnotes:
1. USDA Forest Service, CALVEG, Existing Vegetation: Region 5 - South Coast. Classifications based on City of Los Angeles, 2018 Biodiversity Report, Appendix B1.
2. California Protected Areas Database, California Natural Resources Agency Open Data, 2017.
3. South Coast Missing Linkages Project, South Coast Wildlands, 2008; LA River Tributaries, Geosyntec, 2016.
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Source: OLIN

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Low Need

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2. California Protected Areas Database, California Natural Resources Agency Open Data, 2017.
3. South Coast Missing Linkages Project, South Coast Wildlands, 2008; LA River Tributaries, Geosyntec, 2016.
4. California Protected Areas Database,

Source: OLIN

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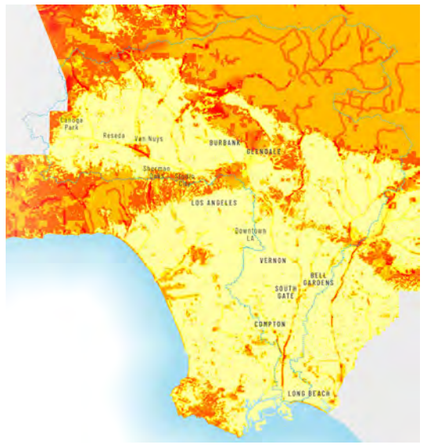
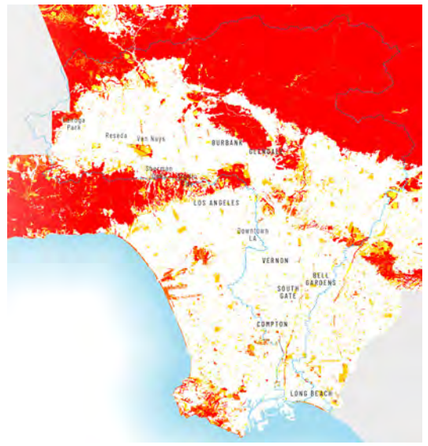
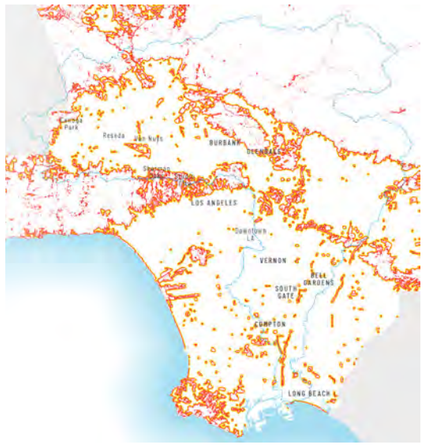
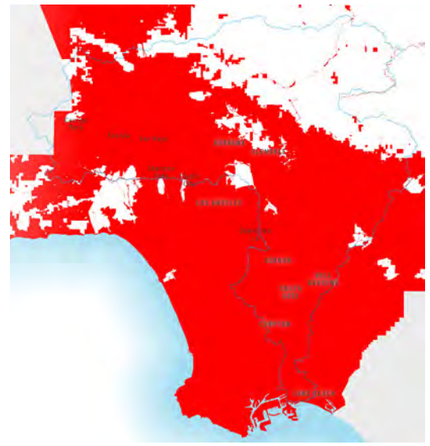
ECOSYSTEMS

Need Analysis:

High Need

Low Need

Ecosystems Need	Habitat Areas[1] 50%	Habitat Areas Buffers[2] 20%	Linkages and Confluences[3] 15%	Unprotected Areas[4] 15%
	= 	+ 	+	+ 
Criteria Type:	State of California / LARMP Data	LARMP Data	State of California / LARMP Data	Existing Data
Description:	CALVEG Regional Dominance types were used to classify existing areas as predominantly urban/barren, invasive vegetation, or native/natural (habitat areas).	Areas closest to existing protected habitat areas that could help further buffer core protected habitat areas.	Missing linkages are areas without connectivity, but based on location are critical. Tributaries and confluences can also provide species connectivity.	Unprotected areas are vulnerable to development and are less likely to sustain habitat areas over time. Ecosystems that are in areas that are unprotected have high need.
Assessment:	Highest Need = (native/natural)* Low Need = (agriculture/barren)	Highest Need = 1 ft area buffer* Low Need = <1000 ft area buffer*	Highest Need = missing linkage, tributary, confluence* Low Need = <5000 ft linkage buffer*	Highest Need = unprotected area Low Need = protected area

Footnotes:
1. USDA Forest Service, CALVEG, Existing Vegetation: Region 5 - South Coast. Classifications based on City of Los Angeles, 2018 Biodiversity Report, Appendix B1.
2. California Protected Areas Database, California Natural Resources Agency Open Data, 2017.
3. South Coast Missing Linkages Project, South Coast Wildlands, 2008; LA River Tributaries, Geosyntec, 2016.
4. California Protected Areas Database,

Source: OLIN

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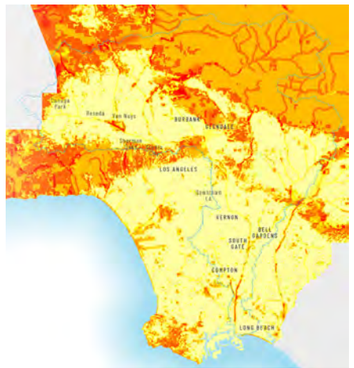
ECOSYSTEMS

Need Analysis:

High Need

Low Need

Ecosystems Need



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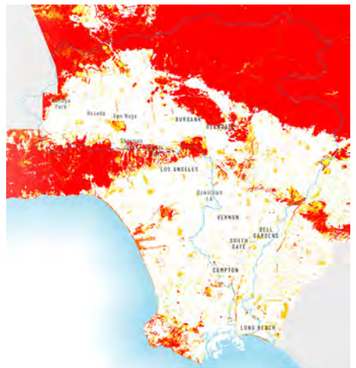
Habitat Areas[1] **50%**



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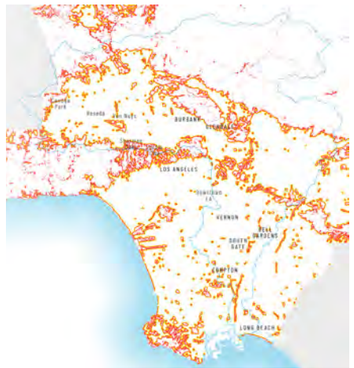
Habitat Areas Buffers[2] **20%**



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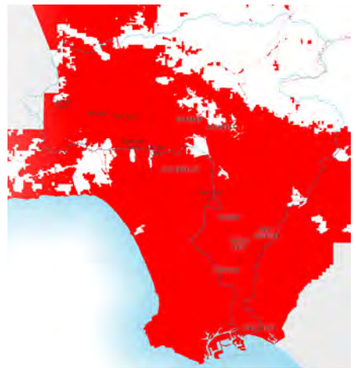
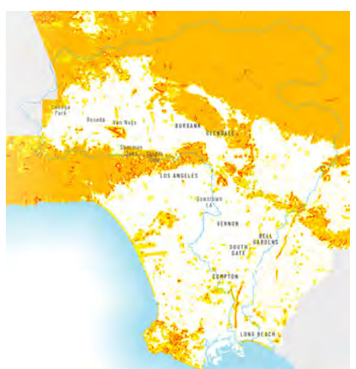
Linkages and Confluences[3] **15%**

+

Unprotected Areas[4] **15%**



Habitat Areas[1] & Habitat Areas Buffers[2] **70%**



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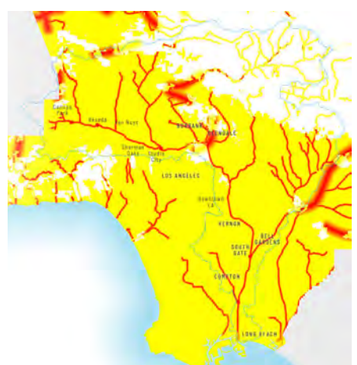
Linkages & Confluences[3] Unprotected Areas[4] **30%**



Footnotes:
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2. California Protected Areas Database, California Natural Resources Agency Open Data, 2017.
3. South Coast Missing Linkages Project, South Coast Wildlands, 2008; LA River Tributaries, Geosyntec, 2016.
4. California Protected Areas Database, 2017.

Source: OLIN

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ACCESS

River Trail Gaps[1] (30%)

Locations on either bank of the LA River that do not currently have a continuous publicly available trail. Areas without an existing river trail or a proposed river trail have a higher need for access and trails.

River Trail Access Points[2] (30%)

Areas greater than a half mile from an existing river trail access points have a higher need for access and trails.

Adjacent Trails[3] (20%)

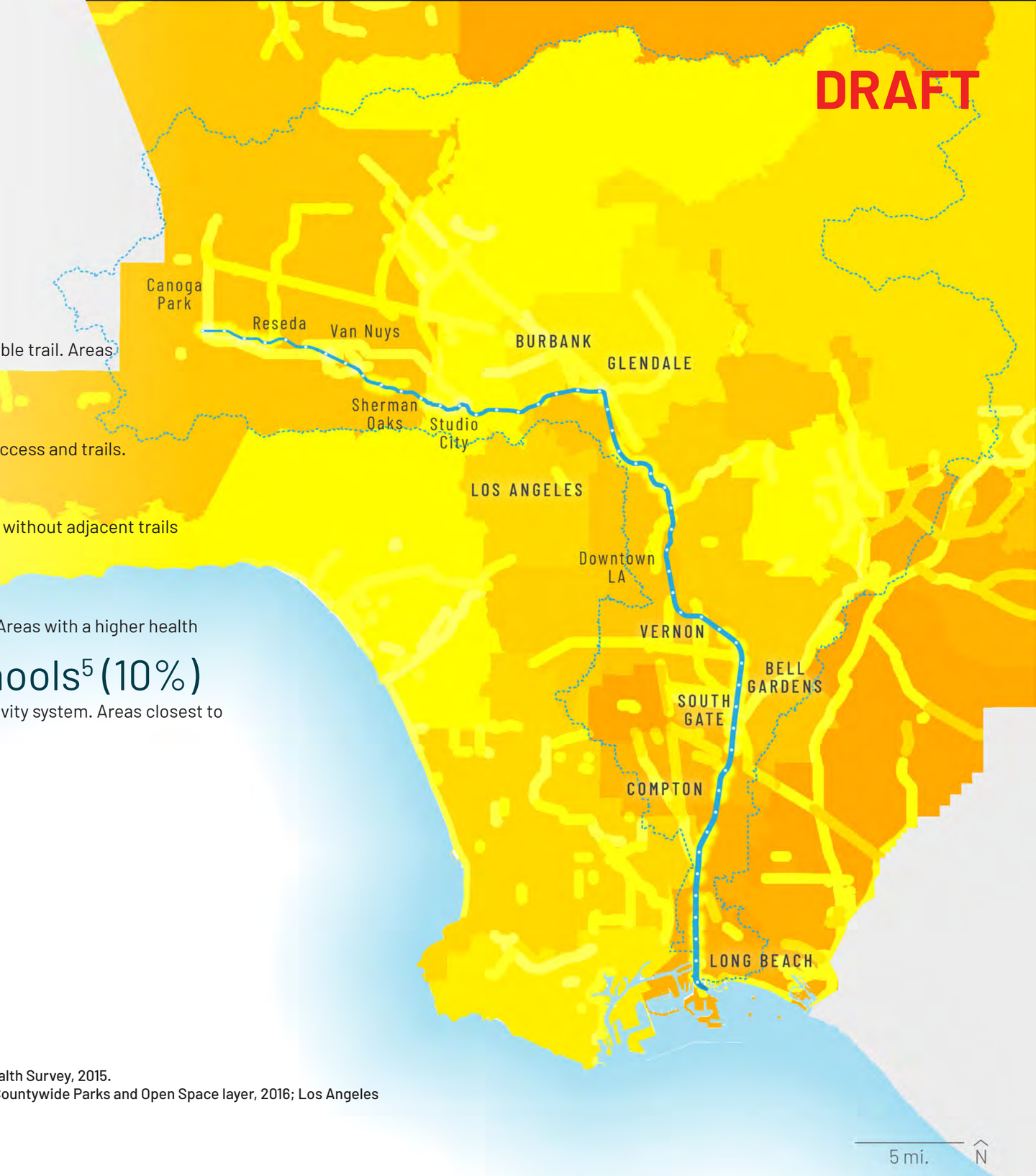
Connecting to adjacent trails improves access to the LA River and regional connectivity. Areas without adjacent trails have a higher need.

Health Composite[4] (10%)

Trails also provide recreation, exercise, and open space, which can improve health outcomes. Areas with a higher health composite score (poorer health conditions) have a higher need for access and trails.

Proximity to Metro Stops, Parks, and Schools[5] (10%)

Connecting important public facilities to the LA River is vital for ensuring an effective connectivity system. Areas closest to existing Metro stops, parks, and schools have a higher need for access and trails.



LA County Need Analysis:

High Need

Low Need

Footnotes:
1. OLIN, Modified from City of Los Angeles, LA River Greenway, LA River Access and Points of Interest, 2018.
2. OLIN, Modified from City of Los Angeles, LA River Greenway, LA River Access and Points of Interest, 2018.
3. Los Angeles GIS Dataportal, Department of Parks and Recreation Trails, 2015.
4. Health composite compiled from the Los Angeles County Department of Public Health Los Angeles County Health Survey, 2015.
5. LA Metro's Active Transportation Strategic Plan Online Data Portal, 2014; Los Angeles County GIS Dataportal, Countywide Parks and Open Space layer, 2016; Los Angeles County GIS Data Portal, LA County Points of Interest Data, 2016.

Source: OLIN

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Source: OLIN

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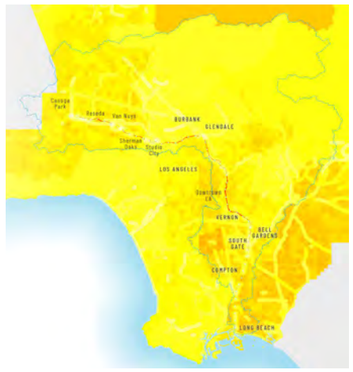
ACCESS

Need Analysis:

High Need

Low Need

Access Need



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River Trail Gaps[1] **30%**

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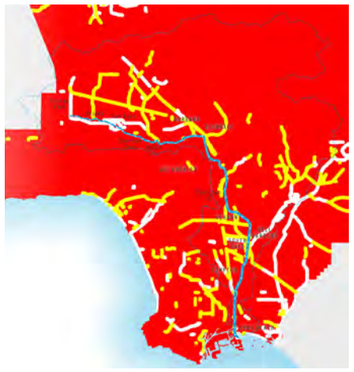
River Trail Access Point Gaps[2] **30%**

+

Adjacent Trail Gaps[3] **20%**



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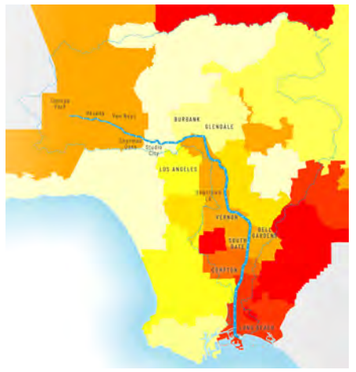
Health Composite[4] **10%**



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Proximity to Metro Stops, Parks, & Schools[5] **10%**

Criteria Type:	City of Los Angeles/ LARMP Data	City of Los Angeles / LARMP Data	Los Angeles County Data	Los Angeles County / LARMP Data	Los Angeles County / LARMP Data
Description:	Locations on either bank of the river without a trail. Areas without a river trail or a proposed river trail have a higher need for access and trails.	Areas greater than a half mile from an existing river trail access points have a higher need for access and trails.	Connecting to adjacent trails improves access to the LA River and regional connectivity. Areas without adjacent trails have a higher need.	Trails also provide recreation, exercise, and open space, which can improve health outcomes. Areas with a higher health composite score (poorer health conditions) have a higher need for access and trails.	Connecting public facilities to the LA River is vital for ensuring an effective connectivity system. Areas closest to existing Metro stops, parks, and schools have a higher need for access and trails.
Assessment:	High Need = no existing river trail* Low Need = existing river trail	High Need = >half a mile from a river trail access point Low Need = adjacent to a mile from a river trail access point	High Need = no existing trail within 1/4 mile Low Need = existing trail within a 1/4 mile	High Need = high health composite score Low Need = low health composite score	High Need = <half a mile from a Metro stop, park, or school Low Need = >half a mile from a Metro stop, park, or school

Footnotes:
1. OLIN, Modified from City of Los Angeles, LA River Greenway, LA River Access and Points of Interest, 2018.
2. OLIN, Modified from City of Los Angeles, LA River Greenway, LA River Access and Points of Interest, 2018.
3. Los Angeles GIS Dataportal, Department of Parks and Recreation Trails, 2015.
4. Health composite compiled from the Los Angeles County Department of Public Health Los Angeles County Health Survey, 2015.
5. LA Metro's Active Transportation Strategic Plan Online Data Portal, 2014; Los Angeles County GIS Dataportal, Countywide Parks and Open Space layer, 2016; Los Angeles County GIS Data Portal, LA County Points of Interest Data, 2016.

Source: OLIN

ARTS & CULTURE

Arts & Culture Asset Density[1] (33%)

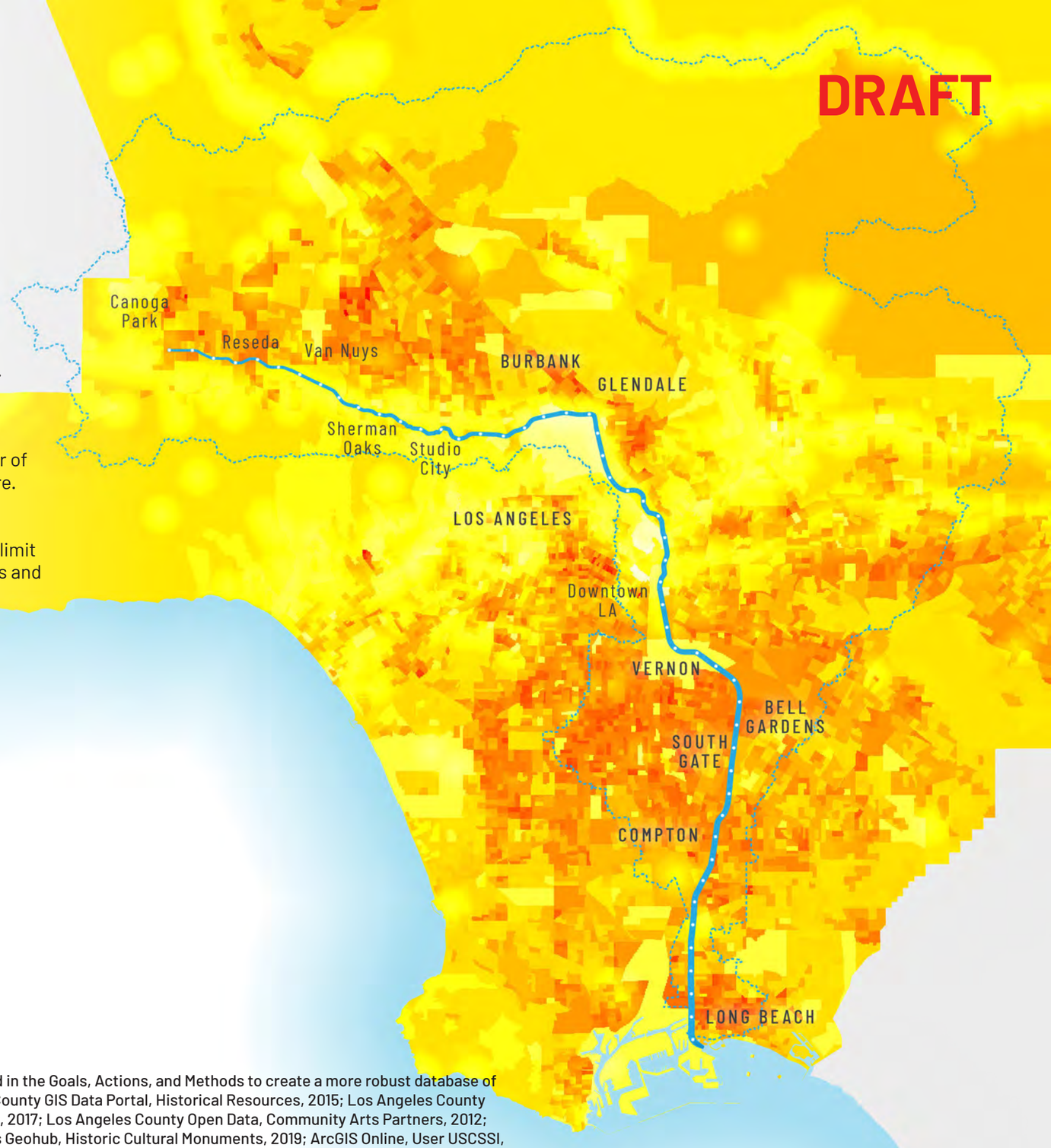
Given the lack of detail about the size of specific assets, the relative density of assets was assessed. Areas with a lower density of assets have higher need for arts and culture.

Population Density[2] (33%)

Population density was used compare the relative number of assets in a given location to the number of people at that location. Areas with a higher population density have a higher need for arts and culture.

Household Income[2] (33%)

Household Income was used to further identify areas where a household's financial constraints may limit access to art and cultural facilities. Areas with a lower household income have a higher need for arts and culture.



LA County Need Analysis:

High Need

Low Need

Footnotes:

1. Asset Mapping is known to be incomplete based on currently available data sources. Future efforts are recommended in the Goals, Actions, and Methods to create a more robust database of arts and cultural resources. Los Angeles County GIS Data Portal, LA County Points of Interest Data, 2016; Los Angeles County GIS Data Portal, Historical Resources, 2015; Los Angeles County Open Data, Los Angeles County Civic Art Collection, 2017; Los Angeles County Open Data, Free Concerts in Public Sites, 2017; Los Angeles County Open Data, Community Arts Partners, 2012; National Register of Historic Places, 2014; Los Angeles Geohub, Historic Preservation Overlay Zones, 2019; Los Angeles Geohub, Historic Cultural Monuments, 2019; ArcGIS Online, User USCSSI, Los Angeles Murals, 2018.
2. U.S. Census Bureau 2012–2016 American Community Survey 5-Year Estimates.

Source: OLIN

DRAFT

ARTS & CULTURE

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LA River Need Analysis:

High Need

Low Need

Footnotes:
1. Asset Mapping is known to be incomplete based on currently available data sources. Future efforts are recommended in the Goals, Actions, and Methods to create a more robust database of arts and cultural resources. Los Angeles County GIS Data Portal, LA County Points of Interest Data, 2016; Los Angeles County GIS Data Portal, Historical Resources, 2015; Los Angeles County Open Data, Los Angeles County Civic Art Collection, 2017; Los Angeles County Open Data, Free Concerts in Public Sites, 2017; Los Angeles County Open Data, Community Arts Partners, 2012; National Register of Historic Places, 2014; Los Angeles Geohub, Historic Preservation Overlay Zones, 2019; Los Angeles Geohub, Historic Cultural Monuments, 2019; ArcGIS Online, User USCSSI, Los Angeles Murals, 2018.
2. U.S. Census Bureau 2012–2016 American Community Survey 5-Year Estimates.

Source: OLIN

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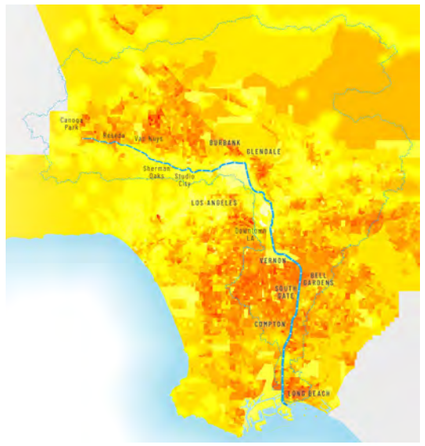
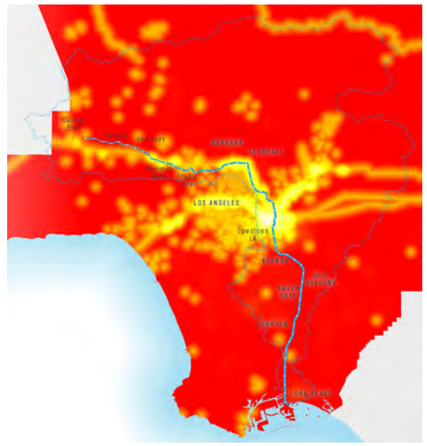
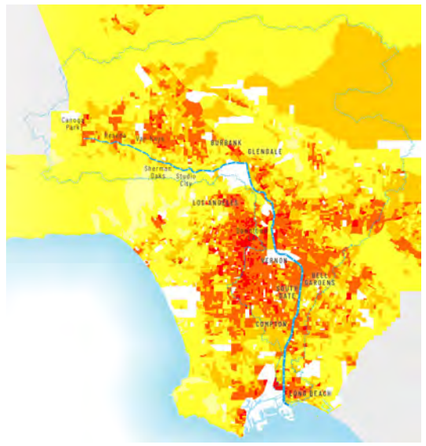
ARTS & CULTURE

Need Analysis:

High Need

Low Need

Arts & Culture Need		Arts & Culture Asset Density[1] **33.3%**		Population Density[2] **33.3%**		Household Income[3] **33.3%**
	=		+		+	
Criteria Type:		LARMP Composite Dataset		U.S. Census Bureau Data		U.S. Census Bureau Data
Description:		Given the lack of detail about the size of specific assets, the relative density of assets was used to evaluate areas with a relatively low density of assets.		Population density was used compare the relative number of assets in a given location to the number of people at that location.		Household Income was used to identify areas where a household's financial constraints may limit access to art and cultural facilities.
Assessment:		Highest Need = low density of assets Low Need = high density of assets		Highest Need = high density Low Need = low density		Highest Need = low income Low Need = high income

Footnotes:
1. Asset Mapping is known to be incomplete based on currently available data sources. Future efforts are recommended in the Goals, Actions, and Methods to create a more robust database of arts and cultural resources. Los Angeles County GIS Data Portal, LA County Points of Interest Data, 2016; Los Angeles County GIS Data Portal, Historical Resources, 2015; Los Angeles County Open Data, Los Angeles County Civic Art Collection, 2017; Los Angeles County Open Data, Free Concerts in Public Sites, 2017; Los Angeles County Open Data, Community Arts Partners, 2012; National Register of Historic Places, 2014; Los Angeles Geohub, Historic Preservation Overlay Zones, 2019; Los Angeles Geohub, Historic Cultural Monuments, 2019; ArcGIS Online, User USCSSI, Los Angeles Murals, 2018.
2. U.S. Census Bureau 2012–2016 American Community Survey 5-Year Estimates.

Source: OLIN

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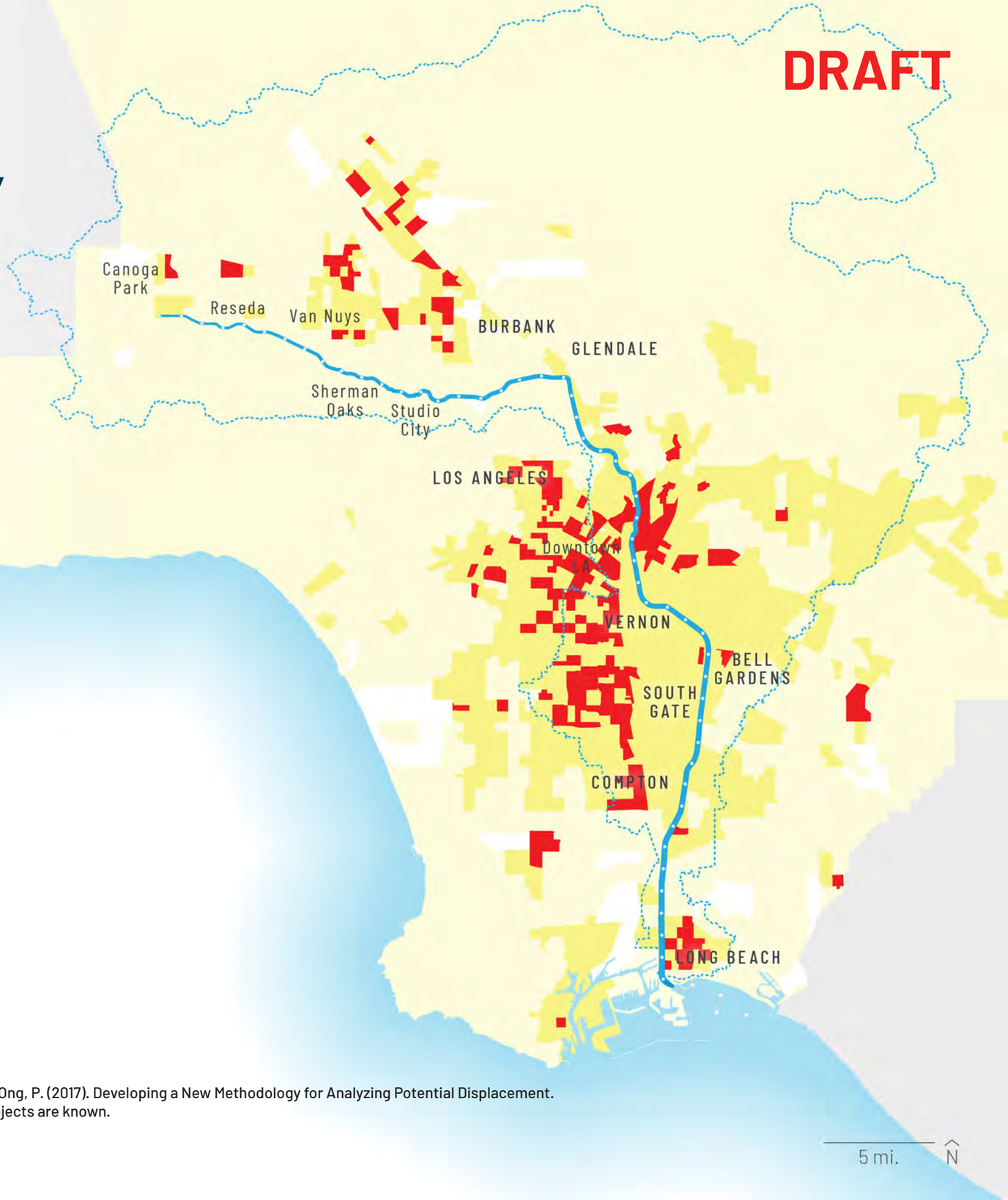
HOUSING AFFORDABILITY

Displacement Index[1,2] (100%)

The Displacement Index combines a variety of socioeconomic indicators to measure the risk of displacement and was developed based on research by the Urban Displacement Project. A higher risk of displacement means there is likely a higher need for housing affordability improvements.



LA River Need Analysis:

High Need

Low Need

Footnotes:
1. Based on research by the Urban Displacement Project: Chapple, K., Loukaitou-Sideris, A., Waddell, P., Chatman, D., & Ong, P. (2017). Developing a New Methodology for Analyzing Potential Displacement.
2. This map should be referenced to determine appropriate housing strategies after sites for infrastructure or parks projects are known.

Source: Street Level Advisors, OLIN

DRAFT

HOUSING AFFORDABILITY

Displacement Index[1,2] (100%)

The Displacement Index combines a variety of socioeconomic indicators to measure the risk of displacement and was developed based on research by the Urban Displacement Project. A higher risk of displacement means there is likely a higher need for housing affordability improvements.

LA River Need Analysis:

High Need

Low Need

Footnotes:
1. Based on research by the Urban Displacement Project: Chapple, K., Loukaitou-Sideris, A., Waddell, P., Chatman, D., & Ong, P. (2017). Developing a New Methodology for Analyzing Potential Displacement.
2. This map should be referenced to determine appropriate housing strategies after sites for infrastructure or parks projects are known.

Source: Street Level Advisors, OLIN

DRAFT

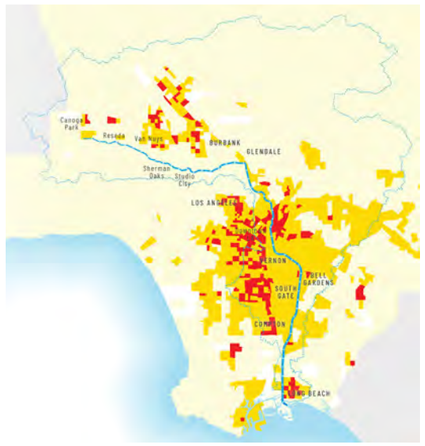
HOUSING AFFORDABILITY

Need Analysis:

High Need

Low Need

Housing Affordability Need



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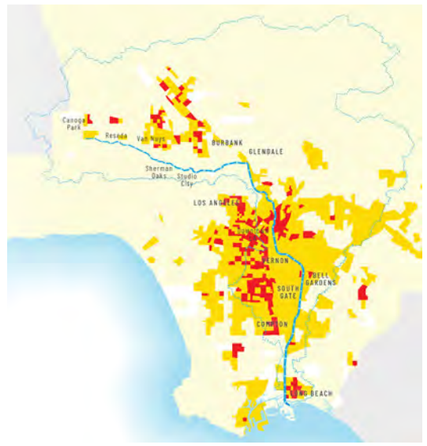
Displacement Index[1,2]

100%



Source Type: LARMP Composite Metric

Description: Combines a variety of socioeconomic indicators to measure the risk of displacement based on research by the Urban Displacement Project.

Assessment:
Highest Need = ongoing displacement / at risk of displacement
Low Need = lower risk of displacement / not vulnerable

Footnotes:
1. Based on research by the Urban Displacement Project: Chapple, K., Loukaitou-Sideris, A., Waddell, P., Chatman, D., & Ong, P. (2017). Developing a New Methodology for Analyzing Potential Displacement.
2. This map should be referenced to determine appropriate housing strategies after sites for infrastructure or parks projects are known.

Source: Street Level Advisors, OLIN

DRAFT

ENGAGEMENT & EDUCATION

Engagement & Education Asset Density [1] (50%)

Given the lack of detail about the size of specific assets, the relative density of assets was assessed. Areas with a lower density of assets have higher need for engagement and education.

Population Density[2] (50%)

Population density was used compare the relative number of assets in a given location to the number of people at that location. Areas with a higher population density have a higher need for arts and culture.

LA County Need Analysis:

High Need

Low Need

Footnotes:
1. Los Angeles County GIS Data Portal, LA County Points of Interest Data, 2016.
2. U.S. Census Bureau 2012–2016 American Community Survey 5-Year Estimates.

Source: OLIN

DRAFT

ENGAGEMENT & EDUCATION

Engagement & Education Asset Density [1] (50%)

Given the lack of detail about the size of specific assets, the relative density of assets was assessed. Areas with a lower density of assets have higher need for engagement and education.

Population Density [2] (50%)

Population density was used compare the relative number of assets in a given location to the number of people at that location. Areas with a higher population density have a higher need for arts and culture.

LA River Need Analysis:

High Need

Low Need

Footnotes:
1. Los Angeles County GIS Data Portal, LA County Points of Interest Data, 2016.
2. U.S. Census Bureau 2012–2016 American Community Survey 5-Year Estimates.

Source: OLIN

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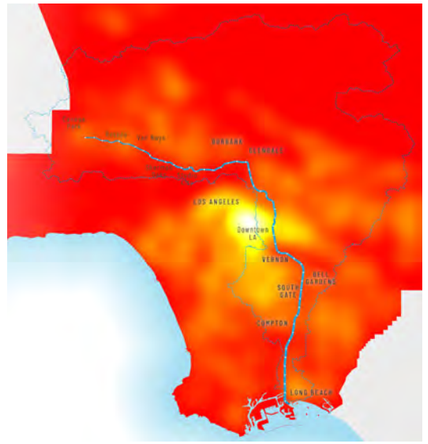
ENGAGEMENT & EDUCATION

Need Analysis:

High Need

Low Need

	Engagement & Education Need		Engagement & Education Asset Density[1] **37.5%**		Population Density[2] **12.5%**
		=		+	
Source Type:			LARMP Composite Dataset		U.S. Census Bureau Data
Description:			Given the lack of detail about the size of specific assets, the relative density of assets was assessed.		Population density was used to compare the relative number of assets in a given location to the number of people at that location.
Assessment:			Highest Need = low density of assets Low Need = high density of assets		Highest Need = high density Low Need = low density

Footnotes:
1. Los Angeles County GIS Data Portal, LA County Points of Interest Data, 2016.
2. U.S. Census Bureau 2012–2016 American Community Survey 5-Year Estimates.

Source: OLIN

DRAFT

WATER SUPPLY

Habitat & Recreation Beneficial Uses[1] (33%)

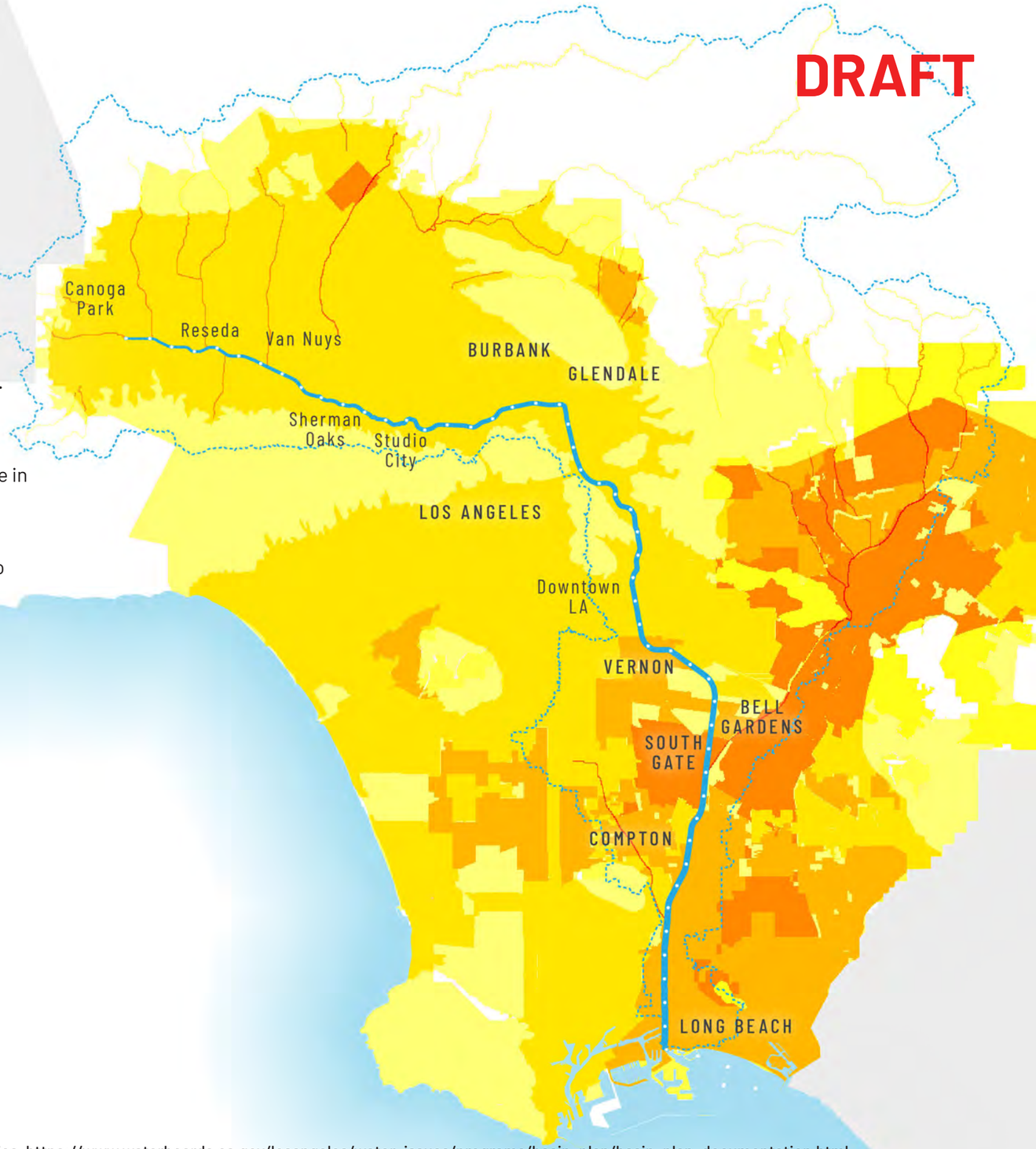
The occurrences of Beneficial Uses related to Recreation or Habitat were identified within streams in the LA River watershed, including the mainstem, in order to indicate where in-channel water supply is needed.

Percent Groundwater Supply[2] (33%)

Urban Water Management Plans prepared by water suppliers in LA County report the sources of water supplied, including groundwater. Areas with groundwater sourcing a significant portion of water supply are in high need of consistent replenishment of groundwater replenishment supply.

Groundwater Basins[3] (33%)

Locations overlaying groundwater basins have need for additional replenishment of groundwater basins to enhance municipal water supply.



LA County Need Analysis:

High Need

Low Need

Footnotes:
1. Los Angeles Regional Water Quality Control Board, Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties. https://www.waterboards.ca.gov/losangeles/water_issues/programs/basin_plan/basin_plan_documentation.html
2. UCLA Water Hub. Water Sources Map. http://waterhub.ucla.edu/watersources.html
3. Olin, Geosyntec

Source: Geosyntec, OLIN

DRAFT

WATER SUPPLY

Habitat & Recreation Beneficial Uses[1] (33%)

The occurrences of Beneficial Uses related to Recreation or Habitat were identified within streams in the LA River watershed, including the mainstem, in order to indicate where in-channel water supply is needed.

Percent Groundwater Supply[2] (33%)

Urban Water Management Plans prepared by water suppliers in LA County report the sources of water supplied, including groundwater. Areas with groundwater sourcing a significant portion of water supply are in high need of consistent replenishment of groundwater replenishment supply.

Groundwater Basins[3] (33%)

Locations overlaying groundwater basins have need for additional replenishment of groundwater basins to enhance municipal water supply.

LA River Need Analysis:

High Need

Low Need

Footnotes:
1. Los Angeles Regional Water Quality Control Board, Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties. https://www.waterboards.ca.gov/losangeles/water_issues/programs/basin_plan/basin_plan_documentation.html
2. UCLA Water Hub. Water Sources Map. http://waterhub.ucla.edu/watersources.html
3. OLIN, Geosyntec

Source: Geosyntec, OLIN

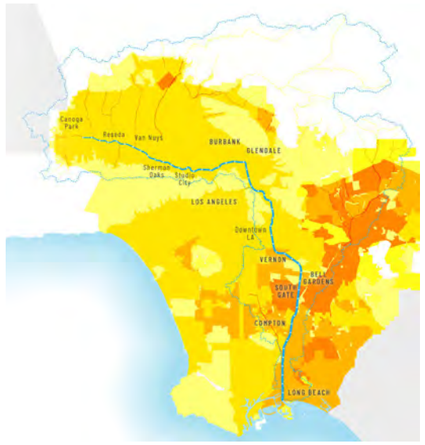
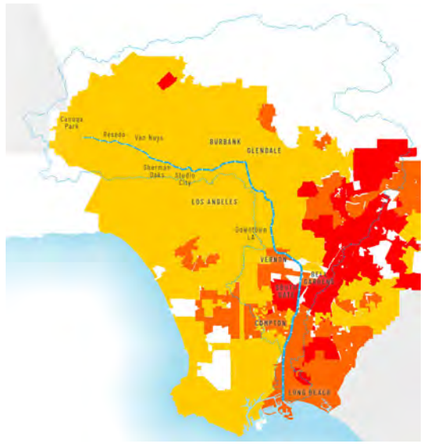
DRAFT

WATER SUPPLY

Need Analysis:

High Need

Low Need

Water Supply Need		Habitat & Recreation Beneficial Uses[1] **33.3%**		Percent Groundwater Supply[2] **33.3%**		Groundwater Basins[3] **33.3%**
	=		+		+	
Criteria Type:		LARMP Composite Dataset		Existing Composite Data		LARMP Data
Description:		The occurrences of Beneficial Uses related to Recreation or Habitat were identified in order to indicate where in-channel water supply is needed.		Areas with groundwater sourcing a significant portion of water supply are in high need of consistent replenishment of groundwater replenishment supply.		Locations overlaying groundwater basins have need for additional replenishment of groundwater basins to enhance municipal water supply.
Assessment:		Highest Need = recreation and habitat beneficial use Low Need = no recreation or habitat beneficial Use		Highest Need = > 90% groundwater Low Need = < 10% groundwater		Highest Need = areas over groundwater basins Low Need = areas not over groundwater basins

Footnotes:
1. Los Angeles Regional Water Quality Control Board, Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties. https://www.waterboards.ca.gov/losangeles/water_issues/programs/basin_plan/basin_plan_documentation.html
2. UCLA Water Hub. Water Sources Map. http://waterhub.ucla.edu/watersources.html
3. OLIN, Geosyntec

Source: Geosyntec, OLIN

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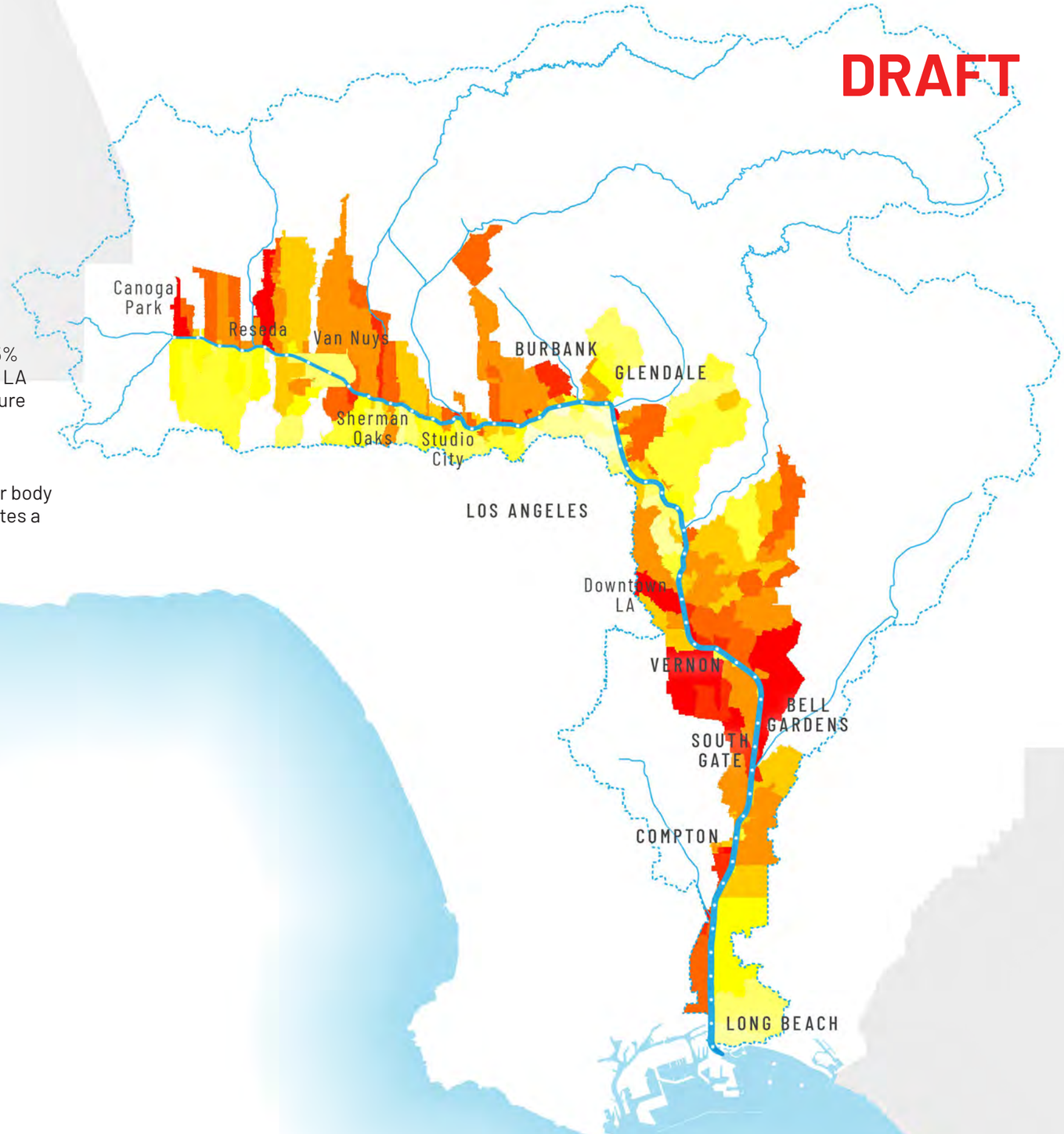
WATER QUALITY

EWMP/WMP Score[1] (50%)

Reflects the weighted difference of target BMP volume (75% weight) versus planned BMP volume (25% weight) for areas in the Upper LA River EWMP (2016), LA River Upper Reach 2 WMP (2015), and Lower LA River WMP (2017) to comply with water quality regulations. Weighting accounts for uncertainty in future implementation. Areas with a higher score have a higher water quality need.

Water Quality Priority[2] (50%)

Represents an integrated evaluation of dry- and wet-weather runoff quality based on receiving water body impairments, identified beneficial uses, and land-use-based pollutant loading. A higher score indicates a higher water quality need.



LA County Need Analysis:

High Need

Low Need

Footnotes:
1. EWMP and WMP score compiled from target versus planned BMP volume assigned to catchment areas within Upper LA River EWMP (2016), LA River Upper Reach 2 WMP (2015), and Lower LA River WMP (2017). Target BMP volume weighted 75% versus 25% planned volume to account for uncertainty in future implementation.
2. Water quality priority is originally developed in the Grater Los Angeles County Region Integrated Regional Water Management Plan (2014)

Source: Geosyntec, OLIN

DRAFT

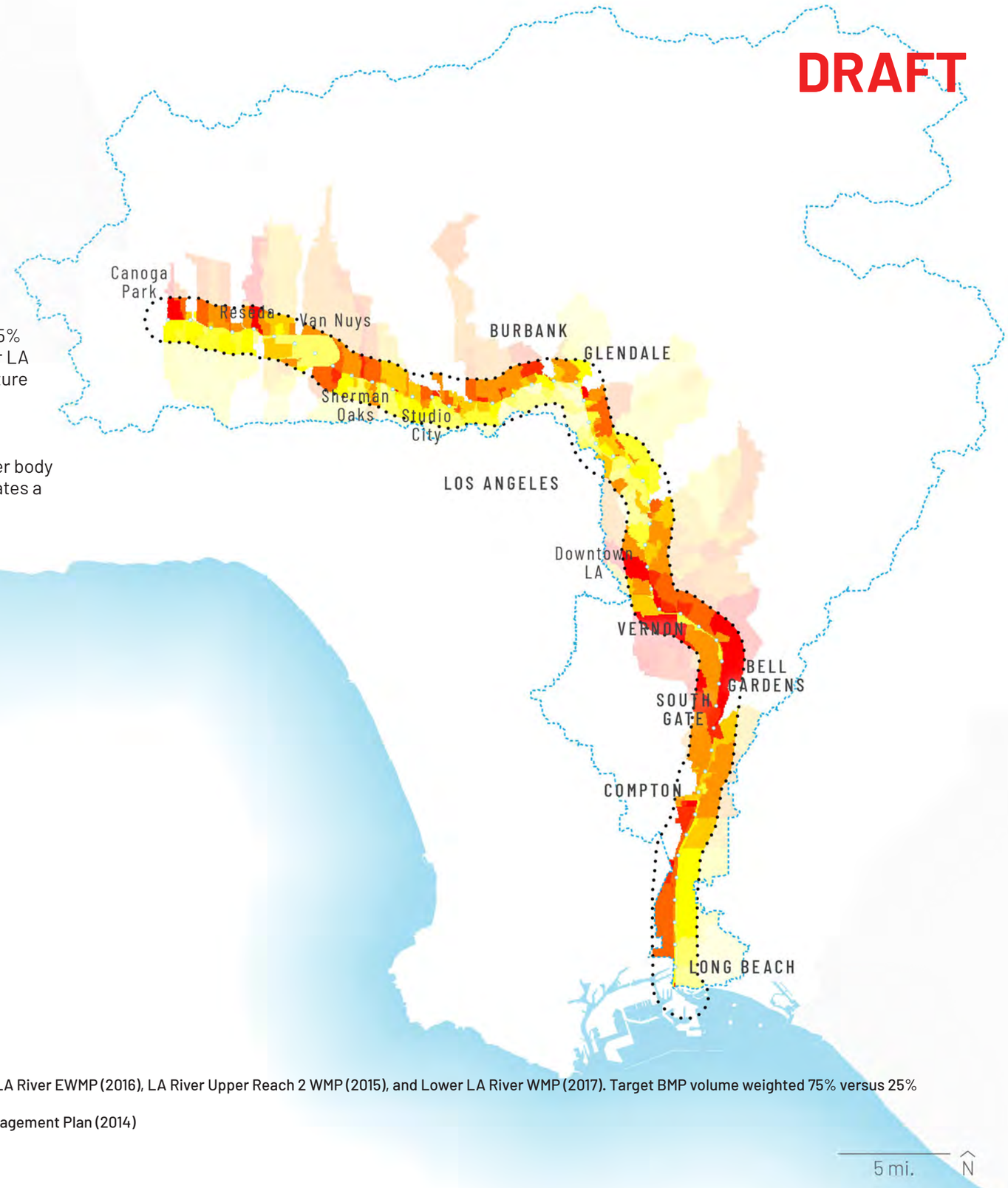
WATER QUALITY

EWMP/WMP Score[1] (50%)

Reflects the weighted difference of target BMP volume (75% weight) versus planned BMP volume (25% weight) for areas in the Upper LA River EWMP (2016), LA River Upper Reach 2 WMP (2015), and Lower LA River WMP (2017) to comply with water quality regulations. Weighting accounts for uncertainty in future implementation. Areas with a higher score have a higher water quality need.

Water Quality Priority[2] (50%)

Represents an integrated evaluation of dry- and wet-weather runoff quality based on receiving water body impairments, identified beneficial uses, and land-use-based pollutant loading. A higher score indicates a higher water quality need.



LA River Need Analysis:

High Need

Low Need

Footnotes:
1. EWMP and WMP score compiled from target versus planned BMP volume assigned to catchment areas within Upper LA River EWMP (2016), LA River Upper Reach 2 WMP (2015), and Lower LA River WMP (2017). Target BMP volume weighted 75% versus 25% planned volume to account for uncertainty in future implementation.
2. Water quality priority is originally developed in the Grater Los Angeles County Region Integrated Regional Water Management Plan (2014)

Source: Geosyntec, OLIN

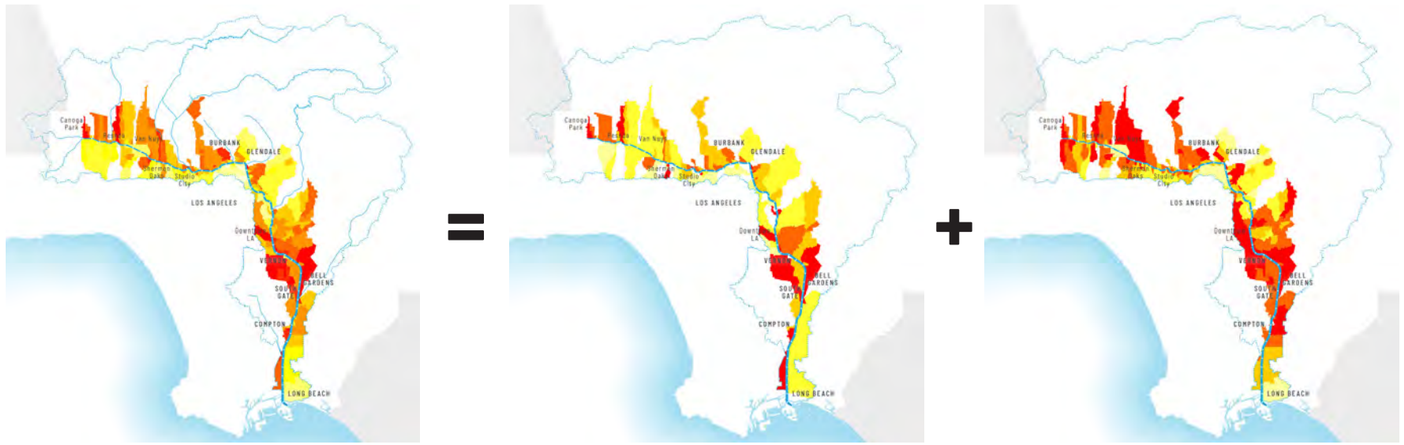
WATER QUALITY

Need Analysis:

High Need

Low Need

Water Quality Need = EWMP/WMP Score[1] **50%** + Water Quality Priority[2] **50%**



Criteria Type:	LA Regional Water Quality Control Board	Greater Los Angeles County Region Data
Description:	Reflects the weighted difference of target BMP volume (75%) versus planned BMP volume (25%) for areas to comply with water quality regulations.	An integrated evaluation of dry- and wet-weather runoff quality based on receiving water body impairments, identified beneficial uses, and land-use-based pollutant loading.
Assessment:	Highest Need = high EWMP/WMP score Low Need = low EWMP/WMP score	Highest Need = high water quality priority Low Need = high water quality priority

Footnotes:
1. EWMP and WMP score compiled from target versus planned BMP volume assigned to catchment areas within Upper LA River EWMP (2016), LA River Upper Reach 2 WMP (2015), and Lower LA River WMP (2017). Target BMP volume weighted 75% versus 25% planned volume to account for uncertainty in future implementation.
2. Water quality priority is originally developed in the Grater Los Angeles County Region Integrated Regional Water Management Plan (2014)

Source: Geosyntec, OLIN