

Solar Energy Systems (SES) History & Moratorium

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CITY PLANNER

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Overview

- ▶ Current Conditions
 - ▶ City Codes relevant to the development of Solar Energy Systems (SES)
 - ▶ Zoning
 - ▶ Site Development Plan Review
 - ▶ Performance Standards
 - ▶ Approved, Completed, & Under-Construction Projects
- ▶ Timeline
 - ▶ Amendments, Moratorium, and Next Steps
- ▶ Potential Amendments under Planning Board's Consideration

Relevant Codes

- ▶ Ch. 56, Unified Development Ordinance
 - ▶ Article 3: Zoning Districts
 - ▶ Permits or prohibits SES in each Zoning District
 - ▶ Article 6: Site Development Plan Review
 - ▶ Governs Planning Board approval process
 - ▶ Size/Impact Thresholds
 - ▶ Submission Requirements
 - ▶ Criteria and Standards
- ▶ Article 8: Performance Standards
 - ▶ Establishes specific standards for SES
- ▶ Article 14: Definitions
 - ▶ Defines types of SES
- ▶ Among others! Not an exhaustive list
- ▶ Other requirements come into play AFTER plan is approved

Codes – Art. 14, Definitions

- ▶ **Solar Energy System (SES), Accessory:**
SES of any size that primarily **serves an on-site principal use** or one on an adjacent parcel. Accessory use SES, are **considered part of the principal use** for zoning purposes including allowable locations.
- ▶ **Solar Energy System (SES), Stand Alone:**
SES of any size that primarily **serves an off-site user** such as the electric power grid or another use on a non-adjacent parcel.
- ▶ **Solar Energy System (SES), Small-Scale:**
A Solar Energy Collector System that has **1,750 square feet or less** of collector panel surface area.
- ▶ **Solar Energy System (SES), Medium-Scale:**
A Solar Energy Collector System that has **more than 1,750 but less than 40,000 square feet** of collector panel surface area.
- ▶ **Solar Energy System (SES), Large-Scale:**
A Solar Energy Collector System that has **more than 40,000 square feet** of collector panel surface area

Codes – Art. 3, Zoning

- ▶ Permits or prohibits SES in each Zoning District
- ▶ Same with Energy Storage
- ▶ Moratorium only applies to Medium- and Large-Scale SES

EXCERPT from 307. Table of Use Regulations		GROWTH AREAS							RURAL AREAS	
		DT Downtown	U Urban	N Neighborhood	C Commercial	CP Commercial Park	I Industrial	BP Business Park	R Rural	DW Drinking Water
Solar Energy System, Stand-alone*	Small-Scale	Y	Y	Y	Y	N	Y	Y	Y	Y
	Medium-Scale	N	Y	N	Y	N	Y	Y	Y	Y
	Large-Scale	N	Y	N	Y	N	Y	Y	Y	Y
Energy storage Systems, Stand-alone*		N	N	N	N	N	Y	Y	N	N
Essential Services	Distribution	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Transmission	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Facilities	Y	Y	Y	Y	Y	Y	Y	Y	Y

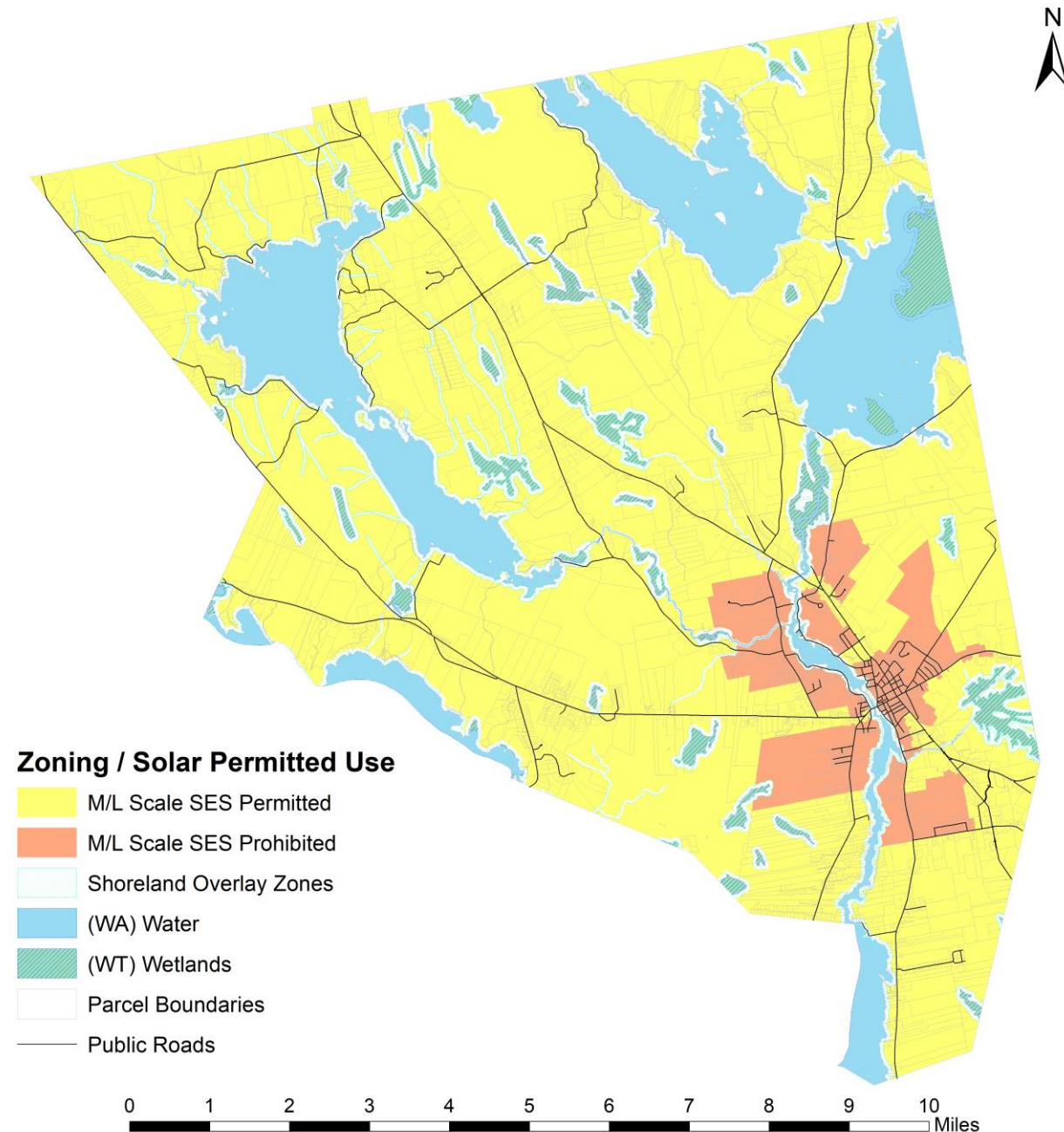
* Accessory Uses are considered as part of the principal use for zoning purposes including allowable locations.

Current Zoning

Where Medium- and Large-Scale SES
are permitted uses

Find the complete Official Land Use
Map here:

<https://www.ellsworthmaine.gov/wp-content/uploads/2019/08/zoning-map-1.pdf>

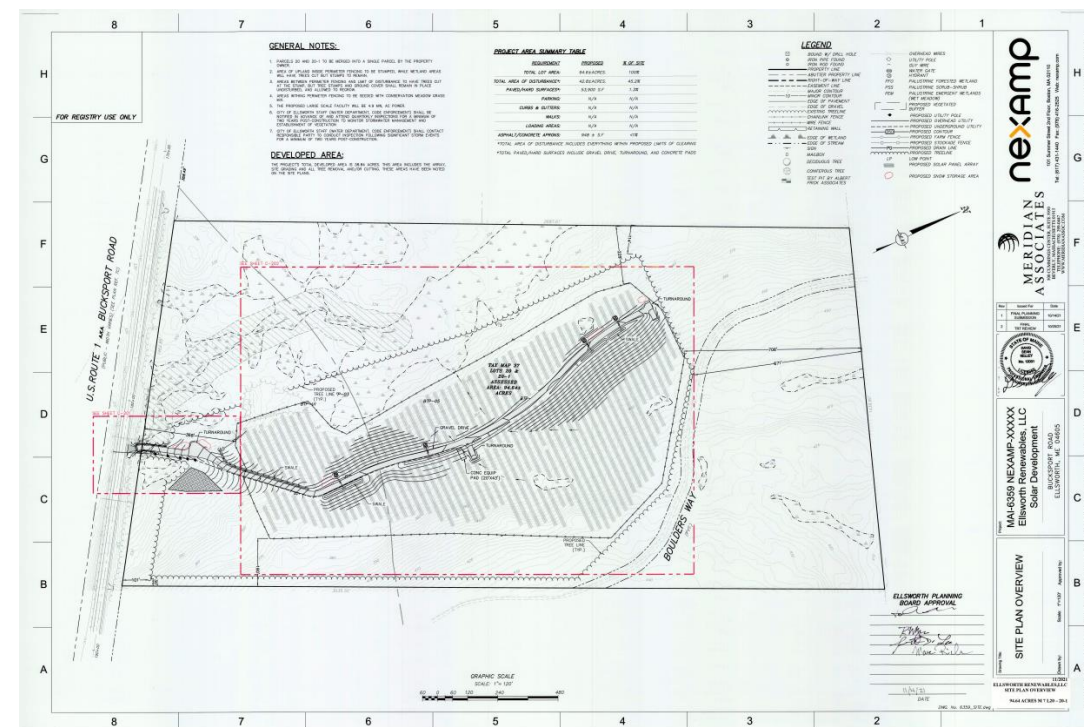


Codes – Art. 6, Site Review

- ▶ Article 6: Site Plan Development Review
 - ▶ Governs Planning Board approval process for larger site development projects
 - ▶ Size/Impact Thresholds
 - ▶ Which projects go to Planning Board
 - ▶ Submission Requirements
 - ▶ Narrative and Plan format information
 - ▶ Existing/Proposed Conditions, Engineering Reports, State & Federal permits, etc.
 - ▶ Criteria and Standards
 - ▶ Planning Board's quasi-judicial review to ensure health, safety, and welfare are preserved

3. PROJECT INFORMATION.	
a. The proposed project is located on which City Tax Map/Lot #(s)?	Map 38, Lots 7 and 8
b. How large is the subject property (in acres or square feet)?	107 acres
c. What is the current zoning of the property to be developed?	Rural and Drinking Water
d. What are the existing use(s) of the property?	Forestry
e. Is the property in the designated Ellsworth Downtown Area?	No
f. In the Urban Core?	No
f. What water bodies does the parcel abut?	None, See Exhibit D
g. Is any portion of the property within 250' of the normal high-water mark of a pond, river, or salt water body?	Yes ☐ No ☒ or is it in Stream Protection? Yes ☐ No ☒
h. Is any portion of the property within a special flood hazard area as identified by the Federal Emergency Management Agency (FEMA)?	Yes ☐ No ☒
i. What legal interest does the applicant have in the subject property? [Attach document]	ownership ☒ option ☐ purchase and sale contract ☐ other: Lease - See Exhibit E
j. What legal interest does the applicant have in any abutting property?	None
k. When was the last time that the subject property was subdivided?	06/01/1987 or earlier
l. What was the nature of the last subdivision?	building units ☐ division of land ☒
4. DEVELOPMENT INFORMATION.	
Definitions of terms used herein may be found in the Ellsworth Unified Development Ordinance.	
a. Proposed use(s) of development:	Solar Energy System, large-scale
b. Number of existing lots	2
Number of lots to be developed:	2
c. Number of existing buildings	1
Number of buildings to be developed:	0
d. Number/type of existing units	1 building
No./type of units to be developed:	0
e. Existing structure footprint area:	1395 s.f.
Proposed structure footprint area:	331,400 s.f.
f. Existing building gross floor area:	1395 s.f.
Proposed building gross floor area:	0
g. Existing impervious surface area:	1395 s.f.
Proposed impervious surface area:	1.27 acres
h. Existing developed surface area:	0
Proposed developed surface area:	42.3 acres
i. Size of disturbed area to be produced during project construction:	42 acres (tree clearing)
j. What is the estimated cost of the proposed development or changes?	\$9,800,000
k. What are the intended start and completion dates of the proposal?	3/4/2021 to 8/11/2021
l. Does the development require extension of public infrastructure?	Yes ☐ No ☒
m. What is the estimated cost for public infrastructure improvements needed to serve the project?	
Water \$	0
Wastewater \$	0
Stormwater \$	0
Other (n/a)	0
n. Identify method of water supply for the proposed development:	
Individual wells	☐
Central well with distribution lines	☐
Public water connection	☒
Other:	None - see Exhibit G

- ▶ Article 6: Site Plan Development Review
 - ▶ Also points to other articles...particularly:
 - ▶ Art. 8 Performance Standards
 - ▶ Exterior Lighting Standards
 - ▶ Buffers, Screening, and Landscaping Standards
 - ▶ Art. 9 Street Design & Construction Standards
 - ▶ Art. 10 Stormwater Management Design & Construction Standards
 - ▶ Art. 11 Parking Standards



Codes – Art. 8, Performance Standards

► Sec. 823 Solar Energy Systems (SES)

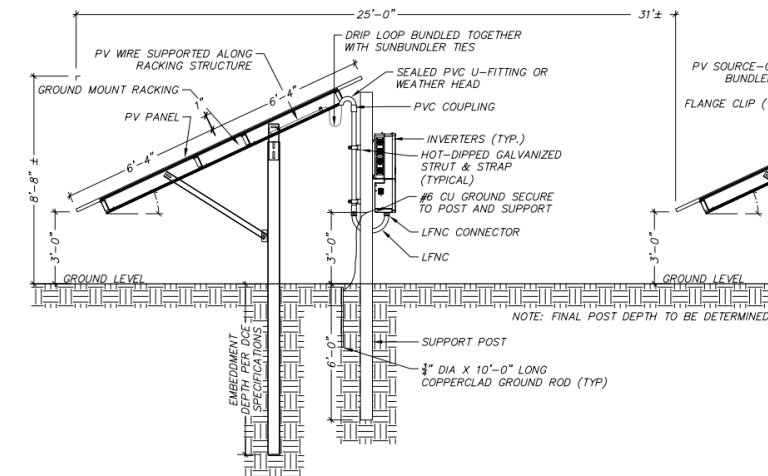
- Fees & Level of Review
- Height
- Lot Coverage
- Setbacks/Buffers
- Stormwater
- Safety
- Signage

► Sec. 824 Energy Storage System (ESS)

- Not part of current discussion

► Sec. 825 Facility Operations, Maintenance, Decommissioning, and Abandonment

- Applicability
- Required Elements
- Financial Assurance of Performance
- Abandonment Provisions



Current Conditions

- ▶ 7 large-scale SES were approved 1 medium-scale SES was approved/constructed
 - ▶ 2 are complete & running (need finishing touches)
 - ▶ 1 is under construction (955 Bucksport Rd)
 - ▶ 4 have not applied for building permits
 - ▶ 3 still have conditions to meet before permits can be issued, 1 appears to have dropped off utility queue
 - ▶ Approvals will expire ~2024 (3 yrs from approval date) if not begun
- ▶ Construction Value: \$46,400,000
- ▶ Fees Collected: \$22,600 (Planning Board for all 7) + \$26,926 (Building Permits for 3 projects)
- ▶ Assessed Value: Not so much.
 - ▶ See [Maine Revenue Services Property Tax Bulletin: Solar Energy Equipment Exemption](#)
 - ▶ Net-metered solar farm <5 MW = all generating equipment exempt

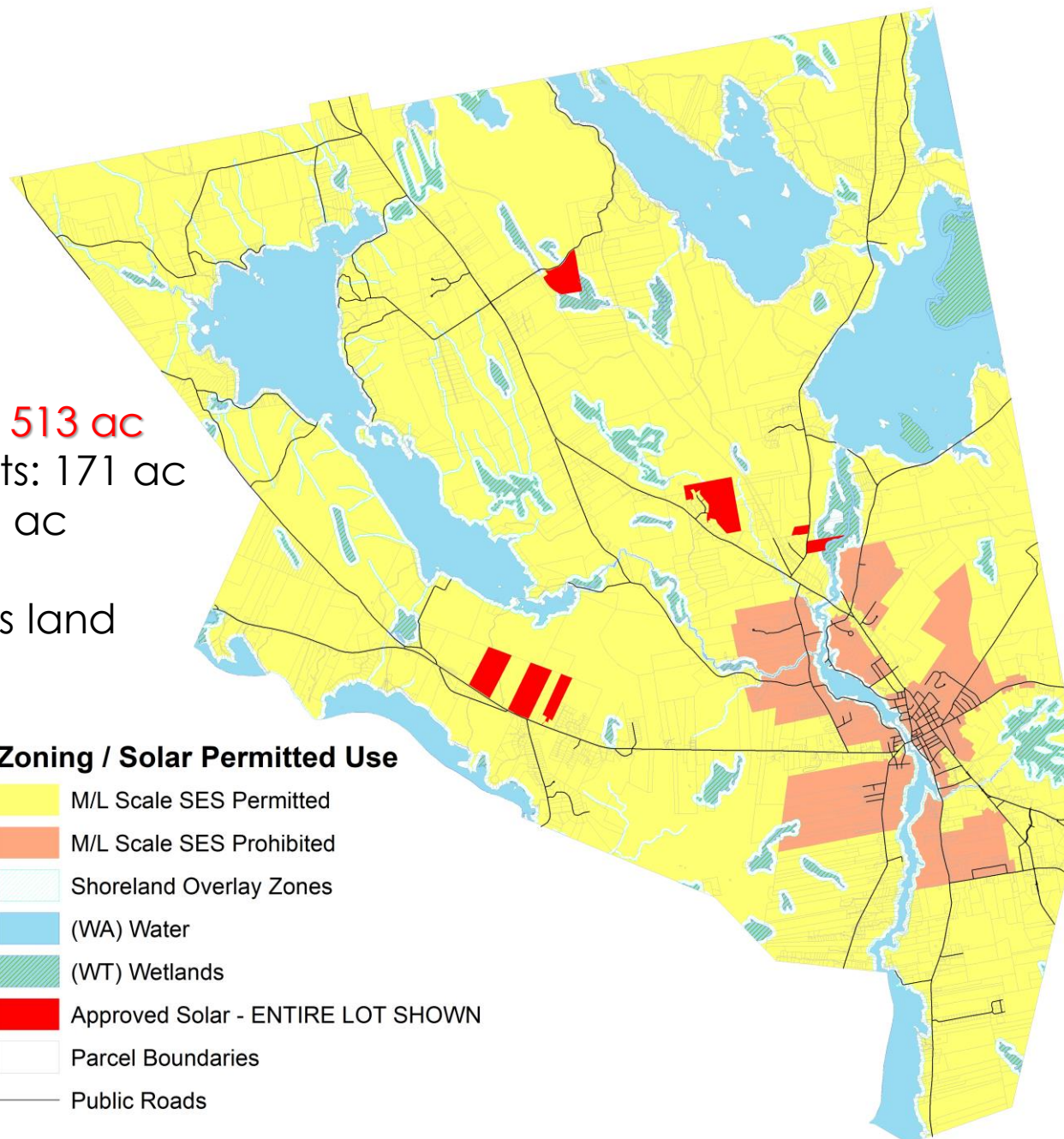


Total **Lots** w/ Approved Projects: **513 ac**
Total Developed Areas within Lots: 171 ac
Ellsworth Total Land Area: 50,746 ac

If all 7 are built? = 0.3% Ellsworth's land
has been developed for solar

Zoning / Solar Permitted Use

-  M/L Scale SES Permitted
-  M/L Scale SES Prohibited
-  Shoreland Overlay Zones
-  (WA) Water
-  (WT) Wetlands
-  Approved Solar - ENTIRE LOT SHOWN
-  Parcel Boundaries
-  Public Roads



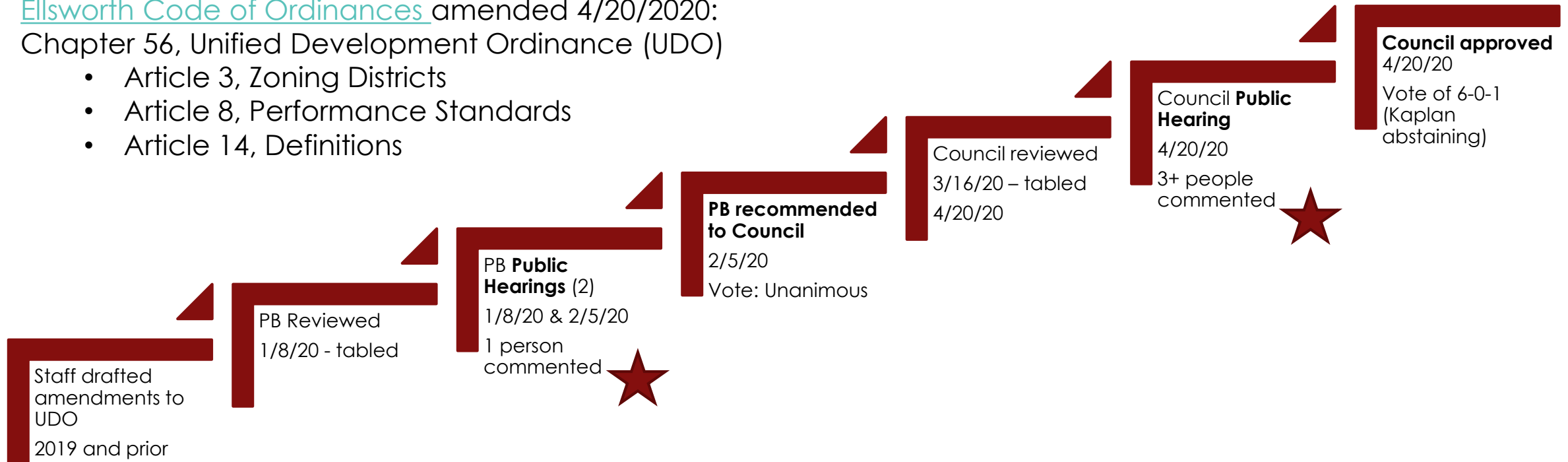
Timeline

AMENDMENTS,
MORATORIUM,
NEXT STEPS

Allowing SES: 2019-2020

[Ellsworth Code of Ordinances](#) amended 4/20/2020:
Chapter 56, Unified Development Ordinance (UDO)

- Article 3, Zoning Districts
- Article 8, Performance Standards
- Article 14, Definitions



Proposals Reviewed: 2020-2021

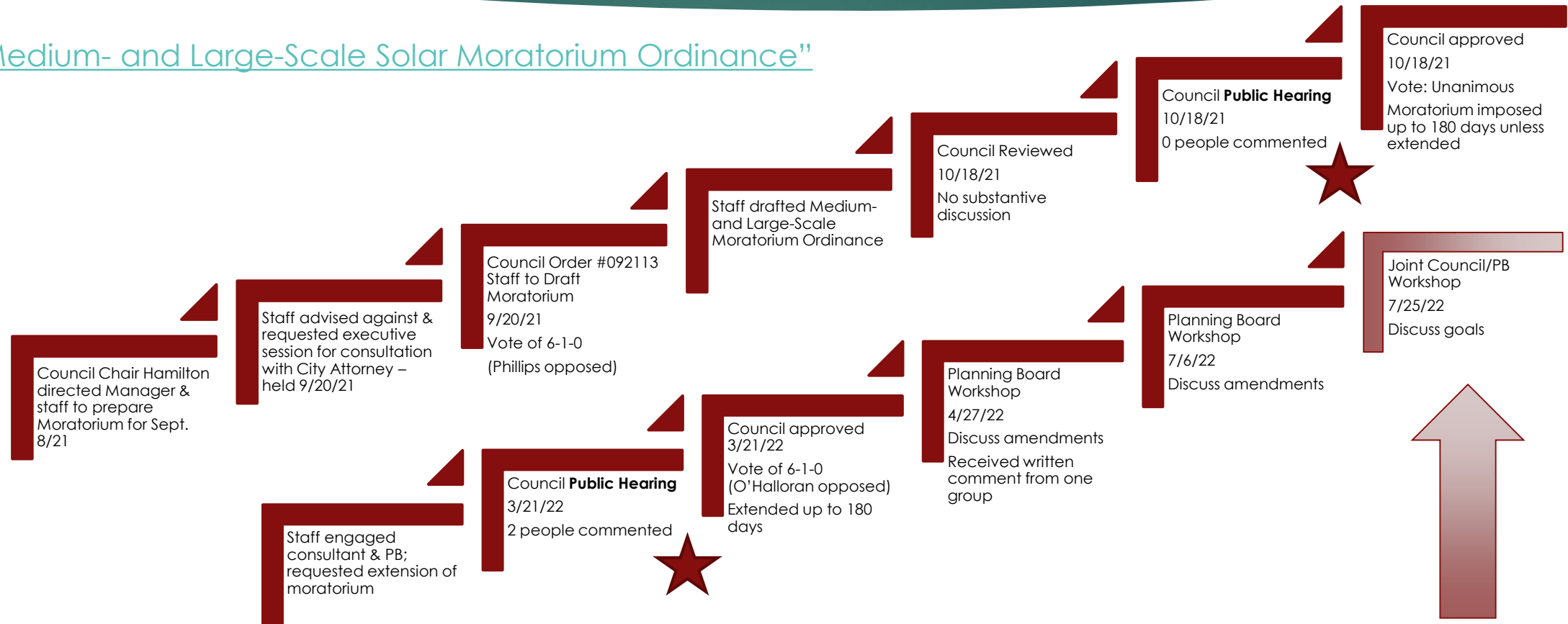
- ▶ 18 months between April 2020 and October 2021
 - ▶ Seven proposed large-scale SES
 - ▶ All approved/Approved with Conditions
 - ▶ One proposed medium-scale SES
 - ▶ Approved
- ▶ Three different City Planners; Two retirements in Code Enforcement Office
- ▶ Planning Board & staff gained experience applying newly-amended ordinances
- ▶ Planning Board & staff learned from applicants about siting, system impacts, and operations
- ▶ Planning Board & staff learned from abutters about concerns
 - ▶ Residential abutters usually attend hearings, ask questions, express worries
 - ▶ No major heartaches, no appeals of Planning Board decisions

Moratorium: 2021-2022

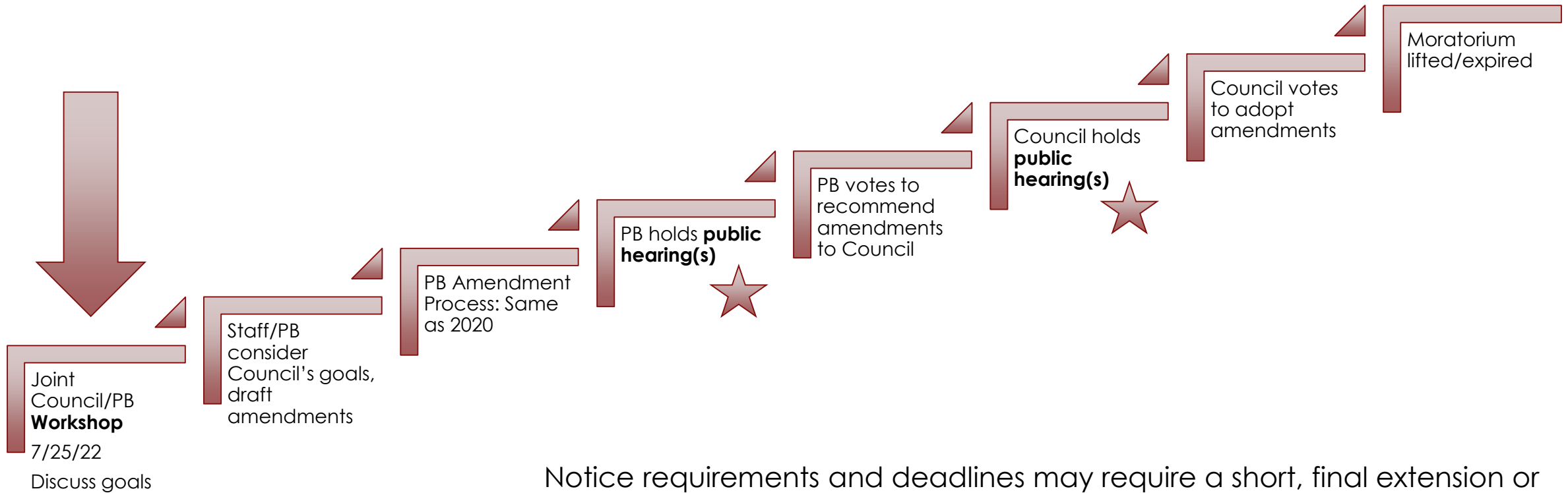
- ▶ Moratoria prohibit the processing or issuance of development permits or licenses.
- ▶ See [Title 30-A M.R.S.A §4356 Moratoria](#):
 1. **Necessity.** The moratorium must be needed:
 - A. **To prevent a shortage or an overburden of public facilities** that would otherwise occur during the effective period of the moratorium or that is reasonably foreseeable as a result of any proposed or anticipated development; **or**
 - B. **Because the application of existing comprehensive plans, land use ordinances or regulations or other applicable laws, if any, is inadequate to prevent serious public harm** from residential, commercial or industrial development in the affected geographic area.
 2. **Definite term.** The moratorium must be of a definite term of not more than 180 days. The moratorium may be extended for additional 180-day periods if the municipality adopting the moratorium finds that:
 - A. The **problem** giving rise to the need for the moratorium **still exists; and**
 - B. Reasonable **progress is being made to alleviate the problem giving rise to the need** for the moratorium.
- ▶ Past Moratoria: methadone (2007), fireworks (2011), and certain medical marijuana uses (2017).
 - ▶ In each, the new subject was addressed after the pause by adopting/amending ordinances

Moratorium: 2021-2022

"Medium- and Large-Scale Solar Moratorium Ordinance"



Next Steps: Now



Notice requirements and deadlines may require a short, final extension or Moratorium may be allowed to expire while process concludes

Amending Ch. 56 – Discussion thus far

- ▶ Refine existing language
 - ▶ Tighten up decommissioning requirements—cost estimating, template language
 - ▶ Is decommissioning that important?
 - ▶ Update definitions
 - ▶ Strengthen buffering standards
 - ▶ Clarify fencing standards
 - ▶ Incentivize use of marginal lands, roofs, even parking lots?
- ▶ Larger ideas
 - ▶ Permit only as a “Conditional Use”
 - ▶ Require Payment in Lieu of Taxes (PILOT)
 - ▶ Prohibit in Drinking Water zone
 - ▶ Minimize impacts to farmland soils, undeveloped wildlife habitat blocks

What about the Comp Plan?

- ▶ We cannot extend moratorium waiting for Comprehensive Plan
- ▶ Decision to permit solar was made in 2020
- ▶ Certainly, the new Comp Plan will clarify how solar fits into Ellsworth
- ▶ Not addressing it in 2004 does not preclude permitting it now
- ▶ Begs the question of what large-scale solar is...
 - ▶ Is it a commercial/industrial use? No workers, no vehicles, no height, no noise...
 - ▶ Or is it a natural resource-based use? How different is it from timber harvesting, fishing/aquaculture, gravel extraction, or large-scale farming?
 - ▶ Is it an obligation?
- ▶ In any case, it can be accommodated within reasonable limits.

Thank You

- ▶ Let's move to questions and discussion...